University of the Western Cape

Environmental Sustainability Studies 2013

The Politics of the Environment
(ESS 112)

“Neither left nor right but in front”

Lecturer: Christoph Huegel
ESS 112, 2nd Semester 2013: The politics of the environment

1. Module outcomes:

After completion of this module you should be able to:

- have a basic understanding of politics and political science
- have a basic knowledge of the characteristics of environmental politics
- analyse the environment as a political issue and distinct policy problem
- evaluate the central ideas of green political thought, esp. the core values of green theory and the ideology of ecologism
- evaluate the environmental movement, e.g. provide a typology of environmental groups and an analysis of their impact
- evaluate governmental and corporate responses to environmental problems, e.g. international agreements and treaties to protect the ozone layer

2. Contact with lecturer:

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Cell phone: 076 9146311

3. Lecture and tutorial times and venues:

There are two lectures plus one practical per week. Attendance is compulsory.  

lectures:  
Monday: 10.50-11.50h in D13 (dentistry pre-clinical)  
Wednesday: 9.40-10.40h in D13 (dentistry pre-clinical)  
Friday: 12:00-13.00h in SC9 (new science lecture halls)  

tutorial:  
Thursday: 14:00-16:00h (life science collaborative learning centre)

4. Assessment:

The coursework mark counts 50% towards the final mark. There will be two assessment exercises (each 20% of CW) plus one test (10% of CW):

- Poster and group presentation in weeks 3 and 4 (20%)
- Writing an activist letter, to be submitted in week 4 (20%)
- Test in week 3 (10%)

The final examination at the end of the semester (in October) will make up 50% of the final mark.
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## Course content

### WEEK 1 (15. – 19.07.2013):

**Introduction to environmental politics**

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* Tutorial 1: Discussion of assessment exercises (presentation and activist letter)

### Assignment 1: Poster presentation

The class will be divided into 10 to 15 groups. Each group will have to **create a poster** on a green movement/organisation/party and **present it** in week 3 or 4 (between 5 and 7 minutes per group). Each group member must also submit a **one page summary** (300-400 words), which should include information they gathered on the movement/organisation/party and a short description of their contribution to the poster. You will get a group mark for the poster and the presentation, but the marks of the group members might vary (+- 5%). You are free in your design-choice, but the following information should be included:

a. What type of movement / organisation is it (e.g. NGO, green party)?

b. Where is it located and where does it operate (i.e. locally, regionally or globally)?

c. When was it established (i.e. give a short history)?

d. What is its special field of interest (i.e. conservation, anti-nuclear movement, etc.)?

e. What are its goals (e.g. do they want to save endangered species; do they want to close down all nuclear power plants, etc.)?
f. How does it operate to achieve it (i.e. do they organise protests, lobby in government, etc.)?
g. Does it rely on members, salaried staff or volunteers?
h. How are its activities funded?
i. Is the organisation active in South Africa?

Mark allocation: poster (40%) + presentation (40%) + summary (20%) = 100%

**WEEK 2 (22.07. – 26.07.):**

**Green political thought**
- Lecture 4: The green critique of our current economic and political order
- Lecture 5: Green political theory: the ideology of Ecologism
- Lecture 6: Ecologism (2)
  * Tutorial 2: Film (Planet Earth – The future)

**WEEK 3 (29.07. – 02.08.):**

**Environmental groups, movements, organisations, and parties**
- Lecture 7: Green movements and organisations
- Lecture 8: Green political parties
  * Case study: Bündnis 90/Die Grünen (the German green party)
- Lecture 9: no lecture, but module TEST to be written in class
  * Tutorial 3: Poster Presentations (1)

**Assignment 2:**
Write an activist letter of about 2 to 3 pages (600-1000 words). You should address this letter to any politician or office holder of your choice (ranging from the President of the country to the Rector of UWC) and deal with one environmental issue. You should express your concern over a particular issue and demand change or action (i.e. “I oppose the construction of another nuclear power plant in SA, because…”). You should briefly describe the problem and why you chose to write to this particular person. Then you should elaborate your arguments and provide evidence that support your point of view. Here you can draw on information and argumentation you have learnt in the course. Stick to the formal requirements of letter writing (more details on the form will be provided in the tutorials). You must also reference and include a bibliography. The letter counts for 20% of your CW mark.

**WEEK 4 (05.08. – 09.08.):**

**Policy-making at the domestic and international political level**
- Lecture 10: Policy-making at the domestic level
  * Case study: Waste management & recycling in Germany and South Africa
  * Alternative case study: the Renewable Energies Act in Germany
- Lecture 11: International environmental treaties and regimes
  * Case study: treaties for the protection of the ozone layer
  * Alternative case study: climate change treaties (Kyoto Protocol)
  * Tutorial 4: Poster Presentations (2)

Module planned by Joelen Pretorius and conceptualised by Christoph Huegel.
Reader compiled by Christoph Huegel.
Glossary

**Acid rain**: Falling rain (or snow) which has become acidic as a result of its combination with gaseous pollutants, such as sulphur dioxide and nitrogen oxides. Acid rain may cause acidification of surface waters, soils and ecosystems.

**Anthropocentrism**: A way of thinking that regards humans as the source of all value and is predominantly concerned with human interests.

**Anthropogenic (human-induced) climate change**: change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

**Biodiversity**: The number, variety and variability of living organisms; sometimes refers to the total variety of life on Earth.

**Capitalism**: An economic system in which the means of production and distribution are privately or corporately owned and development is proportionate to the accumulation and reinvestment of profits gained in a free market.

**Climate change**: Any change in climate over time, whether due to natural variability or to human activity.

**Deep ecology**: The pre- eminent radical economic moral theory which has the primary aim of preserving nature from human interference.

**Democracy**: A form of government in which, in contradiction to monarchies and aristocracies, the people rule. Democracy entails a state in which there is some form of political equality among the people.

**Ecocentrism**: A mode of thought that regards humans as subject to ecological and systems laws and whose ethical, political and social prescriptions are concerned with both humans and non-humans.

**Eco-label**: A seal of approval (or certification) of a product, process or service complying with a particular set of agreed environmental criteria usually awarded by an impartial third party (certification company).

**Ecological footprint**: A measure of the amount of nature it takes to sustain a given population over the course of a year.

**Ecologism**: A distinctive green political ideology encompassing those perspectives that hold that a sustainable society requires radical changes in our relationship with the non-human natural world and our mode of economic, social and political life.

**Genetically modified organism**: New organisms created by human manipulation of genetic information and material.

**Green consumerism**: The use of environmental and ethical criteria in choosing whether or not to purchase a product or service.

**Holism**: The view that wholes are more than just the sum of their parts, and that wholes cannot be defined merely as a collection of their basic constituents.
Intrinsic value: The value which something has, independently of anyone finding it valuable.

IPCC: The Intergovernmental Panel on Climate Change has been established by WMO and UNEP to assess scientific, technical and socio-economic information relevant for the understanding of climate change, its potential impacts and options for adaptation and mitigation.

Limits to growth: The belief that the planet imposes natural limits on economic and population growth.

Modern environmentalism: The emergence, from the late 1960s, of growing public concern about the state of the planet, new political ideas about the environment and a mass political movement.

Organic: An agricultural production system that excludes or limits the use of chemicals. Crop rotation and animal manure can be used to maintain soil productivity in the place of fertilisers. Careful management reduces the need for pesticides, nutritional supplements and medicines.

Ozone depletion: Depletion of ozone in the Earth’s upper atmosphere which leaves the surface of the Earth vulnerable to harmful ultraviolet radiation.

Postmaterialism: The theory that, as material affluence spreads, ‘quality of life’ issues and concerns tend to replace material ones, fundamentally changing the political culture and value of industrialised countries.

Precautionary principle: The principle states that the lack of scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.

Regime: The principles, norms, rules and decision-making procedures which form the basis of co-operation on a particular issue in international relations.

Regulation: Any direct (‘command-and-control’) attempt by the government to influence the behaviour of businesses or citizens by setting environmental standards (e.g. for air quality) enforced via legislation.

Renewable energy: Energy sources, such as wind, sun, geothermal and hydroelectric, that never run out.

Sustainable development: The ability of the present generation to meet its needs without undermining the ability of future generations to meet their needs.

Technocentric: A mode of thought which optimistically believes that society can solve all environmental problems, using technology and science, and achieve unlimited material growth.

United Nations (UN): An international organisation (founded in 1945) whose stated aims are facilitating cooperation in international law, international security, economic development, social progress, human rights, and achievement of world peace.

UNEP: The United Nations Environment Programme (established in 1972) is an international institution that coordinates United Nations environmental activities, assisting developing countries in implementing environmentally sound policies and practices.
Requirements for referencing and how to avoid plagiarism

1. **How to reference, quote and acknowledge other people's ideas**

Referencing, paraphrasing and quoting are essential “ingredients” of academic writing. Whenever you write an assignment (e.g. an essay or research report) you have to provide evidence for your arguments. You will often use evidence that you have read in books, journals, newspapers or internet sites, i.e. information which other people have put together. Therefore you have to indicate in your assignment where you found your information (including ideas and data) – this is called referencing.

Sometimes you will have to reproduce the information using your own words; this is called paraphrasing. Even when you use your own words, you must acknowledge the original source. When you use parts of the original text word for word, this is called quoting. There are three main reasons why you might want to quote (instead of paraphrasing): (i) you might want to use the original voice; (ii) the quote might express the point you wish to make very clearly; or (iii) it is difficult to capture the ideas in your own words. The reference should precede the quote or follow directly after the quote.

At the end of your assignment you must compile an alphabetical reference list or bibliography (by author surname) of all the sources you have used.

Unfortunately there is no universal system of referencing; particular subjects or disciplines prefer to use a particular referencing system. For example, most social science subjects use a version of the author-date system, such as the Harvard or American Psychological Association (APA) styles. History usually uses a system where all the information is contained in footnotes.

While some departments require you follow a particular system, others may allow you some choice – so long as you are consistent. In this course we simply insist that you use one system correctly and consistently. Whatever the system, entries in your reference list or bibliography should include the following information: surname and initials of author, title of publication, year of publication, publisher and the relevant page number(s). Entries for articles from journals must include the journal title and issue number. Internet sources also need to be referenced in enough detail for one to locate the original source.

There are four basic rules for quoting:

1. Short quotations should be enclosed in quotation marks.
2. Quotations of more than two lines (or about 40 words) should be indented.
3. Whether you are quoting someone or referring to that person's ideas, some basic information must be given (in brackets) in the text of your essay (e.g. Mbembe 24). This is called an in-text reference. More detailed information must be given in the bibliography or reference list at the end of your essay.
4. Any quotation has to fit into the structure and grammar of your sentence or paragraph. In other words, you must formulate your sentence in such a way that the quotation fits into it appropriately. You may quote only a fragment of a sentence if this is all that is needed. Ellipsis dots (...) are used to indicate that some words have been left out. If you need to alter anything in a quotation (so that it fits into your sentence) that word or section should be put in square brackets [].

2. **Bibliography**

The bibliography always comes at the very end of the essay. In your assignment you will choose one style only and use this consistently. Note that the authors’ names are listed in alphabetical order. For internet sources use the name of the author (if known) or of the site. An entry is indented from the second line (i.e. use hanging indents). Titles of books or journals are in italics. Titles of articles, stories or poems are in quotation marks. For a chapter in a book, give the title of the chapter, followed by the book's particulars. For a journal article, the title of the journal comes after the title of the article, and is followed by the volume number and the page numbers.
It is useful to follow this basic order and punctuation (except for footnotes):

Surname, first name or initials. Date of publication. Title. Place of publication: publisher.

3. **Plagiarism**

We all learn by copying. Someone shows us how to do something and we try and get it right ourselves. If at first we don't succeed, we try and try again. Copying the **example and model** of others, then, is a vital part of our education.

BUT copying the **words and ideas** of others and pretending that they are our own is a very different matter. It is dishonest. We call this brand of dishonesty **plagiarism**. It is a kind of stealing. In the university, and in most other areas of life, we view it in a very serious light. The equivalent in financial terms would be forging someone's signature on a cheque and drawing money from their bank account. People who do that land up in prison.

Let us be quite clear what we are talking about: 

**Plagiarism is basically presenting the work, ideas, and/or formulations of someone else as one's own.**

Passing off someone else's work as one’s own is a mark of dishonesty and probably of incompetence. If one does this one proves that one is not trustworthy and creates a strong impression that one can’t do the job. Further, it is fair to assume that one doesn’t care about the consequences for other people. That is why there are very serious penalties for plagiarism.

泂任何人都 copying someone else's work - and anyone allowing someone else to copy his or her work will have a mark of 0% entered on the record.
泂Anyone using someone else’s words or ideas for part of an essay or assignment without acknowledging the debt will lose between 20 and 50 of the marks given for the work, depending on the extent of the copying.
泂When a student is penalised for plagiarism, other lecturers in all courses he or she is doing at the university will be informed of the fact. Should any further plagiarism be found, the student will be charged before the student disciplinary court.

Please include this plagiarism disclaimer with every assignment that you hand in:

**Plagiarism Disclaimer**

a. I have read the document on Plagiarism included in the Reader. I know that plagiarism is an unacceptable practice.

b. I have acknowledged the sources which I have used in this assignment through the use of appropriate references and a bibliography.

c. This assignment is the product of my own work. I have acknowledged the assistance of others towards the reading for, and writing and typing of, this assignment where appropriate. I have not copied material from another student for this assignment. No part of this assignment has been directly sourced from the internet or elsewhere without acknowledging the source.

Signed: ……………………………

Date: ……………………………
WEEK 1: Introduction to environmental politics

We will begin the course with a review of the causes of environmental degradation and pollution. The second lecture will give an overview of the basics of politics and explain why environmental problems have a political dimension before introducing the field of environmental politics. In the third lecture it will be explained why making (or changing) policy to protect the environment is difficult by looking at some key characteristics of environmental problems.

The key concepts of this section are:
- industrialisation
- (rapid) urbanisation
- environmental degradation/pollution
- environmental politics
- environment as policy problem

Questions to consider:
1. What is the link between industrialisation and environmental concern?
2. Why is politics an important part of environmental studies?
3. What makes the environment a special policy problem?

Lecture 1: The consequences of industrialisation and urbanisation

A short history of Planet Earth
Planet Earth is between 4.6 and 5 billion years old. We will take the minimum age of 4.6 billion (read: 4,600,000,000) years as starting point for an interesting comparison.
Imagine the Earth to be a 46-year-old person. We don’t really know anything about the first 40 years of this person’s life. Then at the age of 42 the earth began to awaken. Dinosaurs and the great reptiles appeared a year ago, when the planet was 45. Mammals arrived on earth only eight months ago. Modern humans have been around for four hours. During the last hour, humans have discovered agriculture. The Industrial Revolution began a minute ago, and during those 60 seconds people have made a rubbish dump of the earth.¹

The Industrial Revolution(s)
The emergence of (modern) science in the course of the scientific revolution (16th and 17th century) led to many technological improvements in the following centuries. The Industrial Revolution was a result of this human inventive talent and brought about major socioeconomic, political and cultural change in the 18th and 19th century (ca. 1760-1850). It began in the United Kingdom, then subsequently spread throughout Europe, North America, and eventually the world. This period is appropriately labelled “revolution,” for it thoroughly destroyed the old manner of doing things; yet the term is simultaneously inappropriate, because the change did not come abruptly but over decades. The invention that is most commonly associated with the Industrial Revolution is the steam engine, which made it possible to replace human and animal power with machine power and thus to increase productivity (and it could be operated independent from natural conditions unlike the already
existing wind and water mills). The Industrial Revolution however also brought many negative aspects with it, for example environmental pollution, exploitation of factory workers and large-scale child labour (esp. in the coal and iron mines).

The Industrial Revolution eventually phased into the Second Industrial Revolution, also referred to as the Technological Revolution. This revolution began about 1860 and its end is generally considered to be the First World War, i.e. the early 20th century. Whereas the first industrial revolution centered on iron, steam technologies and textile production, the basis of the second industrial revolution was steel, railroads, electricity and chemicals. More inventions and technological breakthroughs led to rapid industrial development in Western Europe, the USA and Japan. New technologies like electricity and communication technologies like the telegraph and the radio became important and had a profound impact on how we live and work up to today. It was the beginning of mass production (and resulted in the “mass society”), which fuelled consumerism – two of the cornerstones of capitalism. However, by 1870 the global market was already saturated with manufactured goods. Increasing production aggravated the problem and was a factor leading up to the Long Depression and the so-called “New Imperialism” (think of the “scramble for Africa”).

**CONSEQUENCES of the industrialisation for planet Earth:**

- Rapid population growth and increasing urbanisation
- Exploitation of natural resources on a large scale
- Accumulation of enormous amounts of (harmful) waste
- Massive pollution (water, air, soil) and environmental degradation (e.g. deforestation)
- Industrialised agriculture led to soil depletion and habitat loss

**Rapid urbanisation, inadequate services and environmental degradation**

The beginning of industrialisation marked the beginning of large-scale urbanisation, as greater concentrations of labour around the mines and mills were necessary. Today, most of urban population growth takes place in the developing world. Half of the world’s population already lives in urban areas and by the middle of this century, most regions of the developing world will be predominantly urban. The numbers are impressive: in the last decade alone the urban population in the developing world grew an average 1.2 million people per week. By 2050, 5.3 billion people in the developing world will live in urban areas, with Asia alone accounting for 3.3 billion people (63% of the world’s urban population). Africa, still the least urbanised region, will by then host a total urban population of 1.2 billion, almost a quarter of the world’s urban population.
This rapid growth of cities in the developing countries is largely due to ongoing rural-urban migration (apart from Latin America). Cities in the developing world are therefore marked by distinct characteristics which makes them different from cities in industrialised countries. The ongoing urbanisation for the most part takes place as growth of existing or creation of new slum areas and squatter settlements. The growth of these settlements is mostly organic and lacks planning, resulting in the occupation of environmentally sensitive and disaster-prone areas, such as wetlands, river beds, creeks, flooding plains, and steep slopes. The same is true for in Cape Town, where a large share of the townships is situated in (former) wetlands and floodplains.

This rapid demographic and spatial expansion of Third World cities means they quickly reach their capacity limits and then often cannot keep up with providing the necessary infrastructure and basic urban services such as housing, water and sanitation because of a lack of resources, although sometimes they choose not keep up to discourage migration to the city. One of the consequences is that the total wastes generated in these cities are only collected partly, which leads to their improper disposal on the streets, in rivers and lakes, vacant lots and in municipal open dumps. Martin Medina has estimated that Third World cities only collect between 50 to 80 percent of the refuse generated, although they spend 30 to 50 percent of their operational budgets on waste management. According to the most recent UN-HABITAT report on the state of the world’s cities, more than 720 billion tons of wastes are produced by the cities of the world every year of which even in large – and thus it would seem more affluent – cities in developing regions, only 25 to 55 percent of wastes are collected – a rate much lower than estimated by Medina.

In some parts of these cities, in particular in low-income neighbourhoods, slums, and squatter settlements, municipal collection of wastes is often nonexistent. Residents of these areas may turn to dumping their garbage in the nearest vacant lot, river, or simply burn it in their backyards. The inadequate disposal of solid wastes is a potential source of land, water and air pollution, and thus poses risks to human health and the environment. Since these cities are preoccupied with extending waste collection and with improving final disposal, they generally lack recycling programmes. One of the questions that arise from this situation is whether the lack of services can be attributed to systematic failure (esp. government policies) or not. In developing countries like India and Brazil waste collection and recycling is to a large extent performed by informal waste pickers. In South Africa there are approximately 45,000 to 85,000 waste pickers, who make a living by collecting recyclables from rubbish bins and landfill sites. They are often considered a nuisance, but are a daily reminder of how wasteful we live and of the marginalisation of the poor. This raises questions about sustainability, which we will explore in more detail in weeks two and three. In addition, the phenomenon of waste picking points to a central issue: poverty is generally seen as both a cause and an outcome of environmental degradation. Consequently, environmentalism (esp. in the Global South) will only be successful in the long run if poverty reduction/eradication and emancipation of the poor is part of the efforts.

In the late 20th century industrialisation and urbanisation were intensified which resulted in the growth of ecologism. It was driven by environmental concerns, in particular the fear that economic growth threatens both the survival of the human race and the planet it lives on. Milestones in expressing this fear have for example been the (unofficial) UN report Only One Earth (1972) and especially the Club of Rome’s report The Limits to Growth in the same year.
**Environmental issues and risks**

There is a wide range of environmental issues and risks (that concern all kinds of people, experts, and subjects), which are a consequence of industrialisation and our consumer societies:

- Biodiversity
- Waste, littering and recycling
- The greenhouse effect and global warming
- The ozone layer and CFCs
- Nuclear technology
- Pesticides
- Overpopulation
- Urbanisation
- Depletion of natural resources
- Health hazards
- Desertification
- Deforestation
- Pollution
- Poverty

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**Lecture 2: The basics of environmental politics**

**What is politics?**

What is understood as ‘politics’ and ‘political’ varies widely. Often politics has been defined in a particularly narrow way and the word is used to refer to processes of government; decision making and administration; elections; the machinations of political parties; and the efforts of groups to influence these political processes. This limited, ‘government-centred’ view of politics emerged in advanced, complex, usually European, societies. Moreover, in the ‘Western’ tradition, government is seen as a public instrument of freedom.

Critics of this perspective see politics in broader terms, as far more universal, capable of crossing cultural boundaries and existing within and outside the institutional boundaries of the modern state (and outside Europe!). Politics is not just confined to the actions of government but is also found in the so-called private sector of the business ‘community’ and in the more informal realms that often operate outside the state. In fact, Leftwich argues that politics exists ‘at every level and in every sphere’ of human societies and that political ‘activities are not isolated from other features of social life.’

In this way, politics refers to our relationships to one another and our interactions, in many different collective and sub-cultural forms: as individuals; as members of families; as informal networks and groups; as organisations; as governments; as corporations; and our activities in a whole range of other institutionalised settings.

All definitions of politics are contested and value-laden. In this course we will come across and make use of both views of politics.
**The political system determines the extent of environmental politics**

The particular way in which the political system is organised has a strong impact on the scope and effectiveness of environmental politics. In liberal-democratic representative systems (see next section) there is significant scope for those concerned about environmental issues to have their say and to try to influence the political process. People are free to form groups, to join political parties, to invent new parties and to go into politics to achieve their goals. None of this says that environmental activists will be successful. Indeed, significant social and economic forces, equally able to organise, will oppose them and seek to keep environmental issues off the agenda (e.g. through lobbying). Nonetheless, the design of the system leaves room for environmental politics.

In authoritarian systems, especially those committed to rapid economic development (like in the former Soviet Union or China), there is very little scope for environmental politics, even for loyal supporters of the regime. Despite this, environmental politics and actions can still happen. For example, the struggle of MOSOP (Movement for the Survival of Ogoni People) over the fate of the Ogoni lands in Nigeria included a strong environmental critique of the operation of the Shell Oil Company as part of its claim for autonomy. Even in China, the increasing environmental problems are slowly moving onto the agenda of the state party.\(^{15}\)

To sum up, there are many factors influencing the characteristics and extent of environmental politics; it is therefore as varied as the issues, the activists and the political systems in which it is practised. Apart from the form of the political system, it is also important how the political institutions of a state are designed and linked. These factors together make up the institutional setting within which environmental conflict and policy-making take place. They also influence how developed civil society is and determine the degree of environmental activism that is possible. We can call all these institutional and structural conditions the “passive” factors.\(^{16}\) There is also an “active” element to environmental politics, which is how individuals and social groups respond to the environment as an issue (→ see week 3).

**Government in democracies**

*What is “democracy”?*

For the module *Politics of the Environment* (but also for your general education) it is important to understand some of the basics of “politics”, by focusing on the question *how and by whom are we governed?* This section will therefore briefly explain some of the key terms and concepts like democracy, government and policy.

Winston Churchill in a speech in the House of Commons on 11.11.1947 said:

*It has been said that democracy is the worst form of government except all the others that have been tried.*

The question to start with then is: *What is democracy?* The word democracy was derived from the Greek word demokratia (= rule of the people), which is a combination of the words demos (= people) and kratos (power/rule). There are numerous definitions of this concept. I will use David Held’s definition:

“Democracy means a form of government in which, in contradiction to monarchies and aristocracies, the people rule. Democracy entails a state in which there is some form of *political equality* among the people.”\(^{17}\)

According to Held this description however comes with some definitional problems:

Who are ‘the people’? What kind of participation? What is the scope of rule? Must the rules of ‘the people’ be obeyed? What about non-participants? When is coercion legitimate (inside/outside)?
There’s been a conflict in history of democratic theory whether democracy should mean some kind of popular power (a form of politics in which citizens are engaged in self-government and self regulation), or an aid to decision-making (giving power to those periodically voted into office). This conflict led to the rise of three basic forms of democracy: direct/participatory democracy (citizens directly involved in decision-making); liberal/representative democracy (elected ‘officers’ are to represent the interests of citizens who voted them into office); and the one-party model (but is this still democracy?).

South Africa like most other countries that are democracies falls into the category of liberal / representative democracy with an elected parliament and/or government. Since in totalitarian systems the scope for environmental politics is very limited, in this course we will focus on (liberal) democratic states.

**Who has the power to govern in a state?**

In a democracy there is a “separation of powers” of the three powers that are supposed to govern a country. (1) The **Legislature** is an assembly with the power to pass, amend, and repeal laws. In modern democracies this assembly is the parliament. (2) The **Executive** is the government of a country or state and consists of the head of state/government plus ministers with the power to execute laws and to issue regulations. It also includes public administration. (3) The **Judiciary** as embodied by the Supreme/Constitutional Court ensures equal justice under law. It also keeps the legislature and the executive in check and makes sure they operate within the framework of the constitution.

**What is the role of government?**

Government refers to the legislators, administrators, and arbitrators in the administrative bureaucracy who control a state at a given time, and to the system of government by which they are organised. Government is the means by which state policy is enforced, as well as the mechanism for determining the policy of the state. Each successive government is composed of a body of individuals who exercise control over political decision-making. Their function is to enforce laws, legislate new ones, and arbitrate conflicts.

**Public policy and policy-makers**

Policy is an explicit, purposive plan of action which includes a design of expectations, interests and goals and the measures taken to execute these designs in response to a situation. A policy-maker is a person or with power to influence or determine policies and practices at an international, national, regional, or local level. Public policy as government action is generally the principled guide to action taken by the administrative or executive branches of the state with regard to a class of issues in a manner consistent with law and institutional customs. Public policy is commonly embodied in constitutions, legislative acts, and judicial decisions. Shaping public policy is a complex and multifaceted process that involves the interplay of numerous individuals and interest groups competing and collaborating to influence policymakers to act in a particular way. These individuals and groups...
use a variety of tactics and tools to advance their aims, including advocating their positions publicly, attempting to educate supporters and opponents, and mobilising allies on a particular issue.

**The link between politics and the environment**

The question that follows from the points described thus far is: how is the environment linked to politics in practice? There are many subjects and experts concerning themselves with issues of the environment. The reason for this is simple: the environment plays an important role in many spheres of our lives. Starting with agriculture and fresh water supplies, resources to recreation we depend on nature. For many of these issues, political decisions have to be taken. For example, where do we grow crops, and where do we build houses and roads? Or where do we get our fresh water supplies from, and how do we make sure it is clean? Where do we dump our waste? These are just a few of numerous questions that concern our daily lives and the relationship with the environment. In a democracy like South Africa, all citizens (theoretically) have the right to participate in the decision-making process. However, (as explained above) in large nation-states most people do not participate directly but elect representatives who act in their best interest. So if for instance Party A advocates to build a waste dumping-site (landfill) in your neighbourhood, and Party B opposes this, you might want to vote for Party B in the next elections if you don’t want the landfill close to your home. Or you might want to vote for the party in national elections that is against building new nuclear power plants.

The legislative (i.e. parliament) and executive (i.e. government) of your country also make and enforce laws that deal with issues of the environment. Furthermore, they are also engaged in the international arena, negotiating international treaties (e.g. fishing quotas; Kyoto Protocol).

**A first approach to environmental politics**

The following is an adapted excerpt from the preface of: Timothy Doyle and Doug McEachern, *Environment and Politics* (Routledge Introductions to Environment Series), (London and New York: Routledge, 1998), p. xiv-xv

Environmental politics has many different faces. It is a world of contrasts and comparisons. Consider, for example, the contrast in a single day in Cape Town. Imagine that you get up early in the morning and drive out towards the east coast to visit Rondevlei Nature Reserve. This was set up in 1952 to conserve a wetland and its birdlife. It now lies behind a large mesh fence separating it from the ‘coloured’ area of Grassy Park and a black settlement. It is a good example of old-style wildlife conservation and, in its way, symbolic of the apartheid era. The focus of Rondevlei is well stated in its publicity brochure:

> Although Rondevlei’s original purpose was to conserve the rich birdlife associated with this important wetland, the emphasis has shifted to the conservation of the indigenous flora, fauna and natural features of the area, while still offering people a place where they can enjoy nature.

> Rondevlei has also become an important environmental education centre, being within easy reach of the many schools in and around the Peninsula.

It is a good bird sanctuary, preserving the habitats against urban encroachment and rescuing habitat from invasive exotic plants. There is even a population of hippopotamuses, although these are not often seen by the casual visitor. The emphasis is on wildlife and nature conservation and the people of the area come as visitors, outsiders ‘to enjoy nature’.

Now imagine that in the afternoon you travel out to Langa to visit the Tsoga Environment Centre. Langa is one of the oldest black townships, and was shaped and blighted by the power of the state and the apartheid imagi-
nation. Nevertheless, it possesses a civic spirit built on the pride of the African population in resistance to that malignant vision. Here in some recycled shipping containers is a thriving civil organisation dedicated to the greening of Langa. This group has developed a permaculture garden, and sponsored the development of local vegetable gardens and the planting of flowers on verges and front gardens in the centre of the township. Tsoga confronts environmental degradation where it hits the everyday lives of the citizens of the new South Africa. Not everyone in Langa is enthusiastic about the goals of the group, as good housing and employment are the most pressing needs of the local community. But with great skill, commitment and dedication Tsoga is slowly making a difference: the planting of appropriate trees lessens the need for the sangomas to collect healing plant materials from the wild. In addition, Tsoga creates parks where before there were only dusty open spaces.

Rondevlei and Tsoga show two different ways of responding to threats to the environment and human well-being. There are of course many more ways of doing environmental politics in order to protect the environment, depending on the goals and the political system. In this course we will explore the reasons for environmental damage and what is at stake as well as the political responses in more detail. Power relations are as important as interests in environmental politics; in this course however, we will (for reasons of simplicity) mainly focus on the latter.

**The three core components of environmental politics**

Environmental politics is a wide-ranging subject with three core components:

1. the study of political theories and ideas relating to the environment
2. the examination of political parties and environmental movements
3. the analysis of public policymaking and implementation affecting the environment at international, national and local levels

**Important questions to consider in relation to environmentalism and politics:**

Should environmental activists try to (substantially) reform the capitalist system by getting elected to parliament, or should they try to radically change the system?

Is collective action (through green parties and pressure groups) or individual action (by changing lifestyles and green consumerism) more effective?

Please read the following pages (1-9) of Neil Carter’s *The Politics of the Environment. Ideas, Activism, Policy* as a more detailed introduction to environmental politics:
Introduction

The environment has been on the political agenda since the late 1960s. Much has happened in that time, but is the planet better off? According to one popular heuristic measure of the state of the environment – the ecological footprint – things are bad and getting steadily worse.¹ The global ecological footprint of humanity is a measure of the amount of nature it takes to sustain a given population over the course of a year. This global footprint first exceeded the Earth’s biological capacity in the late 1970s, since when it has risen steadily, overshooting by almost 40 per cent in 2005 (Venetoulis and Talberth 2005: 12). Moreover, this alarming figure disguises huge disparities among the nations; for example, the per capita footprint (in global hectares) of the USA (108.95) is about seventy times that of Ethiopia (1.56) (Table 1.1). It would be wrong, however, to draw the conclusion that nothing has changed over the last forty years; in practice, the picture is much more complicated, as is illustrated by the following examples.

In April 1986 the Chernobyl nuclear reactor exploded, with catastrophic human and environmental consequences stretching from the Ukraine across much of the Northern Hemisphere. Chernobyl appeared to be the death-knell for the nuclear industry, as most governments stopped commissioning any new nuclear power stations. Remarkably, twenty years later the nuclear industry is back in favour, with the first new nuclear reactor in the EU for over a decade being built in Finland. The French and British governments planning a new generation of nuclear reactors, and President Bush offering financial incentives to anyone willing to build the first nuclear power stations in the USA in a generation. Ironically, the contemporary justification
for nuclear power is the 'green' claim that it is a carbon-free solution to climate change.

The lifestyle choices of many people are increasingly shaped by environmental considerations: they purchase organic products, recycle, drink container water, cycle to work and invest their savings ethically and take 'ecotourist' holidays. Yet global capitalism and consumerist lifestyles spread ever more demanding on the environment. Most people in the industrialised world seem to want more goods, to take cheap flights, to drive their cars and they are wedded to a 'throwaway' culture that results in landfill sites piled high with plastic bottles and obsolete computers.

Citizens have joined environmental groups in their millions, signed petitions and marched on demonstrations. The environmental lobby has become an important actor in national and international politics, while the dramatic stunts of eco-warriors have become a familiar part of the political repertoire. But entrenched business interests and technocratic elites continue to exercise far greater influence over most key policy decisions. Green parties are now an established feature of party politics in many European countries, and have even joined coalition governments in several countries, whilst established parties of all persuasions have adopted a greener rhetoric. However, electoral politics remain dominated by traditional materialist issues, such as the state of the economy, taxation, public order and welfare policy.

Governments everywhere have introduced a wide range of environmental protection policies and regulations, and most countries are formally committed to the principles of sustainable development, but priority is still almost always given to economic growth over environmental protection. Efforts to build international co-operation to address global environmental problems such as climate change have become a central concern of international diplomacy, yet the USA has refused to agree to make even the limited and inadequate emissions reductions contained in the Kyoto Protocol, and rapidly industrialising major powers such as China and India have not been required to make any commitments.

Whilst there is no doubt that environmental issues have had a big impact on contemporary politics, the frequency with which governments adopt business-as-usual responses to environmental problems raises the cynical thought that perhaps nothing much has really changed. This puzzle is one of many challenges confronting environmental politics, which has rapidly become an established subject of political enquiry.

The rationale behind this book is that environmental politics is a distinctive subject that is worthy of study both in its own right and also for the challenges it poses for the wider discipline of politics. Environmental politics is a widening subject with three core components:
1. the study of political theories and ideas relating to the environment;
2. the examination of political parties and environmental movements;
3. the analysis of public policy-making and implementation affecting the environment at international, national and local levels.

The broad aim of this book is to provide an introduction to environmental politics that covers all three aspects of this rapidly expanding subject. The primary focus of the book is on environmental politics in the industrialised world. It is the affluent industrialised countries of Europe and North America that are largely responsible for causing contemporary environmental problems and it is essential that they take the lead in solving them. Much of the substance of environmental politics - ideas and theories, parties and movements, policy initiatives - is rooted in the industrialised world alone. Although North-South issues and development themes regularly surface in the book, for reasons of substance, practicality and space, the book has a primary focus on advanced industrialised countries. The rest of this introduction identifies the distinctive features of environmental politics and explains the structure of the book.

So, in what ways is environmental politics distinctive? One distinguishing characteristic is that it has a primary concern with the relationship between human society and the natural world. This human-nature relationship connects the extraordinarily diverse set of issues encompassed by environmental politics, which include wilderness preservation and nature conservation, air and water pollution, the depletion of scarce resources such as fish stocks, rainforests and endangered species, the use of nuclear power and biotechnology, and global problems such as biodiversity loss, climate change and ozone depletion. Traditionally,
Ozone depletion: Depletion of ozone in the Earth’s upper atmosphere which leaves the surface of the Earth vulnerable to harmful ultraviolet radiation.

Holism: The view that wholes are more than just the sum of their parts, and that wholes cannot be defined merely as a collection of their basic constituents.

location: A perspective which, rather than examining individual issues in isolation, focuses on the interdependence of environmental, political, social, and economic issues and the ways in which they interact with each other.

At this point it is important to provide some historical context because the emergence of this wider environmental discourse is a relatively recent development. Of course, many of the problems that we now regard as environmental, such as pollution, deforestation and land degradation, are not new. In the classical world, Plato, Lucretius and Caeser all commented on the problem of soil erosion (Wall 1994a, 2–3). The collapse of the Mayan civilisation hundreds of years ago can probably be attributed to deforestation and soil erosion (Pentling 1992). Much later, however, it was the industrial and scientific revolutions of the eighteenth and nineteenth centuries that really created the conditions for contemporary concern about the environment. In particular, the process of industrialisation contributed to environmental degradation by accelerating resource consumption, urban development and pollution. One of the earliest examples of what we would now call environmental legislation was the 1863 Alkali Act in Britain, whilst in the USA the first legal action against air pollution occurred in 1876 in St Louis (Paehlke 1985: 21). The first wave of concern about environmental issues can be traced to the emergence of conservation and nature protection groups in the latter part of the nineteenth and the early twentieth centuries, reflecting a growing middle-class interest in nature and the protection of wilderness and natural resources (Lowe and Goyder 1983). Several leading pressure groups, including the Sierra Club in the USA, the Royal Society for the Protection of Birds in the UK, and the Naturgesellschaft Deutschländ (NGD) in Germany, date from this period. The conservationist movement established a firm base through the twentieth century as most countries saw a gradual accumulation of policies affecting various “environmental” issues, ranging from the regulation of industrial pollution to the creation of national parks. Nevertheless, it was not until the emergence of ‘modern environmentalism’ – the wave of popular concern about environmental issues that swept across the developed world during the 1960s – that the environmental discourse became widespread (Pepper 1995) (see Box 1.1).
of Americans celebrated and protested on Earth Day; still the largest environmental demonstration in history. The burgeoning environmental movement certainly helped to popularise the environmental discourse. Governments set up environmental ministries and agencies and introduced swaths of new legislation to protect the environment. The watershed 1972 UN Stockholm conference, which examined how a range of global environmental problems affected human life, marked the entry of the environment onto the international agenda. Thus, by the early 1970s, the component parts of environmental politics had started to take shape: the appearance of new political ideas and ways of thinking about the environment; the rise of a mass environmental movement; and the creation of a new policy agenda.

These three core components of environmental politics provide the framework for this book, which is divided into three parts to reflect the distinctive contribution made by each area of study: ideas; parties and movements; and policy.

Part I explores different ways of thinking about the environment. A major theme of the book is to explore whether there is now a sufficiently comprehensive and distinctive view of environmental issues to talk in terms of a green political ideology, or 'ecologism' (Ottoson 2000). In particular, green political thought offers two important insights. The first is the belief that we need real political change, not just technical fixes. The second is the recognition that the limits to growth which, unless we change our ways, will be exceeded sooner rather than later. Radical greens draw the conclusion that we need a fundamental reassessment of our value systems and a restructuring of existing political, social and economic systems in order to achieve an ecologically sustainable society. Part I assesses this claim that ecologism is a distinctive ideology. Chapter 2 provides an introduction to environmental philosophy by exploring ethical questions about how humans ought to think about and act towards nature. Chapter 3 outlines and analyses the green political programme and assesses the relationship between green ideas and other political ideologies.

Part II turns to the question of how we get to a sustainable society, with a focus on collective action. Environmental activism is now a very broad church. Green parties have become established in several countries and there are many 'environmentalists' operating within established political parties. Beyond parties, the contemporary environmental movement now encompasses mass-membership pressure groups such as the Sierra Club, international non-governmental organisations (NGOs), including Greenpeace and Friends of the Earth, thousands of local grassroots groups and radical protest groups such as Earth First! Whether by directly influencing the policy process or indirectly raising public consciousness about environmental issues through media campaigns and protest activities, the environmental movement has become a significant political actor and agent of change. In Chapter 4 the rise of green parties is examined in the context of the claim that they represent a 'new politics': a range of structural and institutional factors is explored to explain why green parties have achieved electoral success in some countries, but failed elsewhere, with a particular focus on Germany, France and Britain. Chapter 4 investigates the impact of environmental issues on party politics. It looks first at the way green parties, notably the German Greens, have dealt with the transition from pressure politics to parliamentary respectability and then into government; secondly, it assesses the impact of environmental issues on established parties, through case studies of Germany, Britain and the USA. Chapter 6 explores the development and achievements of environmental groups, particularly in the USA and Britain, using the dynamic tension between the large, mainstream environmental lobby and grassroots action as a means of exploring some central questions of green agency, or how to achieve political change.

Finally, Part III is concerned with environmental policy; specifically, it examines progress towards the implementation of sustainable development. While governments may be deaf to the radical message of ecologism, many have been influenced by the alternative policy paradigms of sustainable development and ecologism. Policy paradigms, which offer the promise of protecting the environment by reforming capitalism. As a result, radical ideas like the 'precautionary principle', and innovative policy instruments such as eco-taxes, have begun to appear on the policy agenda. At an international level, the search for solutions to global environmental problems has engendered unprecedented efforts to secure comprehensive international cooperation between independent sovereign states to solve problems such as ozone depletion. However, policymakers have discovered that environmental issues pose distinctive and pressing problems. Chapter 7 explores the environment as a policy problem, identifying its distinguishing characteristics and outlining

**Policy paradigm**: A framework of ideas and standards that specifies the nature of a problem and the policy goals and instruments needed to address it.

**Ecological modernisation**: A policy strategy, which aims to restructure capitalist political economy along more environmentally benign lines based on the assumption that economic growth and environmental protection can be reconciled.

**Precautionary principle**: The principle that the lack of scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.

**Eco-tax**: A tax levied on pollution or on the goods whose production generates pollution.
the traditional policy paradigm, which has proved unable to cope with the range and intensity of contemporary environmental problems. The resilience of this traditional policy paradigm is explained by the structural power that capitalism gives to producer interests and by the segmentation of the policy process, but the chapter also explores a range of policy models and frameworks that can help make sense of environmental policymaking and show how change is possible. Chapter 8 analyses the strengths and weaknesses of the alternative policy paradigms of sustainable development and ecological modernisation, and the remaining chapters evaluate how far they have been implemented. Chapter 9 looks at the emergence of international co-operation between nation states intended to address problems of the global commons, with detailed studies of climate change and ozone depletion.

Chapter 10 examines the relationship between globalisation, trade and the environment, and assesses the impact of three key institutions: the World Trade Organisation, the North American Free Trade Agreement and the European Union. Chapter 11 investigates progress towards a greener government by examining how far environmental policy considerations have been integrated into routine policymaking processes. Chapter 12 analyses the strengths and weaknesses of different policy instruments, concentrating on the key debate between the competing claims of regulatory and market-based instruments, with particular studies of climate change policies in the energy and transport sectors.

Throughout Parts II and III an informal comparative approach is employed. It is informal in the sense that it makes no attempt to follow a rigorous comparative methodology; but it is comparative in that it uses examples and case studies from several different countries, mostly from Europe, the USA and Australasia, to illustrate the arguments.

Another key theme of the book is that environmental politics, in addition to being a distinctive and fascinating subject worthy of study in its own terms, is important because it challenges established political discourses, political behaviour and policy agendas. Thus the growing significance of environmental politics has seen political philosophers extend mainstream theories of justice to consider whether non-human nature or future generations of humans have interests or rights or are owed obligations. Political ideologies, including conservatism, liberalism, socialism and feminism, have had to respond to the environmental challenge, giving rise to several new hybrid concepts, such as ecocentrism and ecofeminism. Where green parties have achieved electoral success, they have destabilised long-standing party alliances and voting patterns. The growing legitimacy and influence of environmental groups has frequently disrupted established policy networks and challenged the influence of producer interests over the policy process. The sustainable development paradigm forces governments to rethink the way they make policy. Traditional Realist accounts of international relations struggle to account for the growth of co-operation and collective action to prevent environmental degradation. The book will show how the rise of environmental politics has therefore been responsible for a widespread re-examination of established assumptions, interpretations and beliefs about contemporary political ideas and behaviour.

Conversely, core political ideas inform our understanding of environmental politics. Concepts such as justice, democracy and equity are central to green political theory. For example, an analysis of the green commitment to participatory democracy can draw on a rich literature on democratic theory and practice. The political science literature on new politics and postmaterialism offers important insights about the development of the environmental movement. The study of environmental policymaking is incomplete without concepts and frameworks drawn from the public policy literature, such as agenda-setting theory or policy network analysis.

Some familiar political dichotomies also resurface. Is the state or the market more effective for achieving environmental policy outcomes? Are centralised or decentralised political structures better at dealing with environmental problems? Most importantly, in debating how to achieve a sustainable society, greens confront the familiar dilemma of environmentalism versus radicalism. Should environmentalists pursue an evolutionary reform of the capitalist system by getting elected to parliament, or should they seek nothing less than a radical transformation of the system? Should groups adopt conventional or unconventional forms of protest? Is collective action (through green parties and pressure groups) or individual action (by changing lifestyles and green consumerism) more effective? In returning to some of these themes in the concluding chapter, I argue that, as the environment has become an increasingly mainstream issue, the centre of gravity in environmental politics has shifted from a radical rejection of contemporary society to a relatively narrow concern with ecological issues, to a reformist acceptance of capitalist liberal democracy accompanied by a broader social justice agenda.

Further reading and websites

Pelling (1992) is a very readable environmental history of the world. GIvone (1995) offers a fascinating account of the early history of environmentalism.
Lecture 3: The environment as a policy problem

The environment is generally a more complicated policy issue for governments and administrations than other issues, because environmental problems are usually more complex and require long-term thinking as well as cooperation across various sectors of government or between different countries – or both. Environmental issues thus make it difficult for governments to enact laws and regulations in order to protect the environment and reduce pollution or to generally change the economic parameters towards more sustainability. There are seven main characteristics that distinguish environmental from other issues when it comes to policy-making, which are explained in more detail below.

Key issues:

- What are the core characteristics of environmental problems?
- Where does power lie in environmental policymaking?
- What are the structural and institutional barriers to policy change?
- Why does policy change?

Core characteristics of the environment as a policy problem

This section is an adapted version of the pages 174-181 of Neil Carter’s *The Politics of the Environment*.

1. Public goods

The first thing to consider is that many environmental resources are ‘public goods’. By this we mean that each individual’s consumption leads to no subtraction from any other individual’s consumption of that good (e.g. clean air). In short: public goods are for everyone, and nobody has the right to own them. This is different from private goods, which are protected by the right of property. The public nature of environmental problems has important consequences for policymakers because efforts to protect the environment may encounter significant collective-action problems. The benefits to be gained from using a public good are often concentrated among a handful of producers while the costs may be spread widely.

The idea of the ‘Tragedy of the Commons’ was popularised by Garrett Hardin. He invites us to picture a medieval village pasture that is open to all and to assume that each peasant will try to keep as many cattle as possible on this land. Eventually, the carrying capacity of the land will be reached. However, when confronted with a decision about whether or not to put an extra cow on the common land, the rational self-interested peasant will recognise that, whilst all the benefits of the extra cow accrue to her or him alone, the costs – the effects of overgrazing – will be shared with the other villagers. Thus each villager will keep adding more cows until the common land is destroyed:

Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all. (Hardin 1968: 1244)

Hardin uses the common land of a medieval village as a metaphor for contemporary environmental problems to show how private benefit and public interest seem to point in opposite directions because individually rational actions may produce collectively irrational outcomes. This metaphor can be used to analyse contemporary problems such as over-fishing and deforestation.
Furthermore, if individuals cannot be excluded from the benefits that others provide, then each has the incentive to free-ride on the joint efforts of others to solve the problem. For policymakers it is therefore difficult to make laws that protect public goods or to prevent harm like pollution. This has also consequences for the use of common resources, as illustrated in “The Tragedy of the Commons” (see box).

2. Transboundary problems

Problems of the global commons are frequently transboundary: for example climate change, ozone depletion and marine pollution do not respect national borders. Global environmental problems are a major threat to the environment and require concerted action by the international community. However, if one nation takes action to reduce ozone depletion or prevent global warming, it cannot exclude other nations from the benefits. An individual government can compel the citizens and the companies within its territory to change their behaviour in order to protect the environment, but there is no such thing as a ‘world-government’ that could force every country to conform. As a consequence, efforts by the international community to address transboundary problems have led to unprecedented international cooperation between states and the formation of international regimes and institutions to persuade reluctant nations to support joint action (see week 4).

3. Complexity and uncertainty

Policymaking can be hampered by the complexity and uncertainty that characterise many environmental problems. It is often difficult to assess the complex relationships between natural and human-made phenomena. Let us take the example of climate change, from which a set of questions emerges: Is the climate changing? Are humans responsible? What are the impacts? How can the effects be avoided/mitigated? What policies are necessary? These few questions show the complexity and uncertainty surrounding this issue. Depending on the answers to these questions, the responses will vary significantly. Genetically Modified Organisms (GMOs) illustrate the problem of uncertainty – we just don’t know yet if they are dangerous to human health and natural habitats. Many issues are also complex and interconnected, therefore they are non-reducible. This means these problems cannot be solved by just addressing individual parts in isolation, because policies dealing with one specific problem might have unintended and damaging consequences elsewhere. For example, in the 1950s local air pollution in Britain’s industrial towns was reduced by building taller factory chimneys, only for it to be discovered many years later that this ‘solution’ had simply exported the pollution to fall as acid rain in Scandinavia. Consequently, policymakers cannot just deal with one part of the problem but often need to set up broader policies. Furthermore, the issue of complexity and uncertainty shows that science and professional experts are an important part of environmental policymaking. For instance, problems like climate change and ozone depletion cannot even be identified without science. Lastly, different views and interests of policymakers, lobbyists and scientists make solutions even more difficult, and in liberal democracies often lead to open political conflict.

4. Irreversibility

The problem of uncertainty is exacerbated by the irreversibility of many environmental problems. For instance, once the Earth’s carrying capacity is exceeded, then environmental assets may be damaged beyond repair. Scarce resources may be exhausted and species may become extinct. Irreversibility places great pressure on policymakers to “get it right”, for unlike fiscal or welfare policy (where a poorly judged tax rate or benefit payment can be corrected in the following year’s budget) it may not be possible to correct an earlier mistake in environmental policy to avoid irreversible damage.
5. Temporal and spatial variability

Many environmental issues are complicated by the fact that their impact will be long-term, whereas remedial policies need to be adopted before the full negative effects of a problem are felt. Although action to protect future generations may be needed now, politicians tend to have short-term concerns – tomorrow’s newspapers, forthcoming opinion polls or the next election – and they know how difficult it is to persuade people to accept self-sacrifice today in order to protect those who are not yet born. In short, it is easier to make policy that responds to today’s political pressures than to tomorrow’s environmental problems.

Similarly, there are huge variations in the spatial impact of environmental problems. For example, the depletion of Himalayan forests results in flooding down-stream in Bangladesh. Rising sea-levels caused by global warming will cause most damage to low-lying lands such as Egypt and the Maldives.

Spatial and temporal variability mean that the costs of environmental problems, and their solutions, are unevenly distributed. This means that inevitable environmental policy will produce winners and losers. The challenge for governments is to balance competing interests, but this raises important issues of equity and social justice between current and future generations as well as between poor and rich nations.

6. Administrative fragmentation

The administrative structure of government is usually divided into distinct policy sectors with specific responsibilities such as education, health care, or defence. A core of ministries concerned with economic matters – typically finance, industry, employment, energy, agriculture and transport – make policy decisions affecting production, consumption, mobility and lifestyles that will frequently have negative consequences for the environment. Yet these individual ministries often engage in a blinkered pursuit of narrow objectives with little consideration for their environmental impact. A transport ministry might implement a massive road-building programme, while responsibility for protecting the environment is typically given to a separate ministry. The instinct of bureaucrats is to break problems down into separate units, but the interdependence of economic and ecological systems does not respect these artificial administrative and institutional boundaries. Many environmental problems are cross-sectoral and require co-ordinated responses that overcome sectoral boundaries.

7. Regulatory intervention

Environmental damage is often a by-product of otherwise legitimate activities; as a consequence, governments may have to intervene in the economy and society to regulate these damaging activities. Regulatory intervention can involve a mix of policy instruments, not just legal instruments: for example, setting factory emission standards or encouraging the recycling of waste paper. The regulatory character of much environmental policy contrasts with many other policy areas. Regulatory interventions will usually impose some kind of cost on key interests in society and may have significant distributive consequences. As a result, regulatory proposals are often met with resistance from businesses and trade unions, who point to the dangers of reduced competitiveness or job loss, and from consumers who have to pay higher prices for cleaner or safer goods. Thus the effectiveness of regulatory interventions may be limited by this historical tension between economic growth and environmental protection.

This section has identified seven core characteristics of environmental problems. The first five are intrinsic to the environment as a policy issue; the remaining two characteristics reflect the institutional structures and policymaking processes of modern government.
The traditional policy paradigm

A policy paradigm provides policymakers with the terminology and a set of taken-for-granted assumptions about the way they communicate and think about a policy area. The traditional paradigm that emerged during the 1970s treated the environment like any other new policy area, rather than recognising the interdependency of the relationships between ecosystems and political, economic, social and cultural systems. Few countries possessed a comprehensive national plan setting out an anticipatory, comprehensive and strategic approach to the environment. Instead, a specialised branch of government – an environment ministry – and various new agencies were formed to deal with environmental issues. Environmental policy was treated as a discrete policy area. Agencies had few powers over decisions taken in other policy sectors and there was little policy coordination and considerable scope for problem displacement. This meant that policymakers were not able to deal with environmental problems adequately. The weaknesses in the traditional paradigm have become increasingly apparent to policy elites. But despite the emergence of the alternative paradigm of sustainable development, the traditional paradigm has proved very resistant to change. Although change in general is slow, the question here emerges whether economic growth still enjoys top priority even though its negative consequences have been acknowledged.

Political obstacles to change

As indicated before, there are a number of political obstacles to a change in policymaking towards more environmental sustainability. Amongst these are (1) the special interests of different groups, (2) the institutional structure of the state and government, (2) sectoral divisions within government (and the bureaucracy), and (3) the power of producers and businesses. The technocentric commitment of policymakers to economic expansion encourages them to define the interests of the state as largely synonymous with those of producers. Often interests of producer groups trump those of environmental groups. Therefore economic growth takes priority over environmental protection.

Achieving policy change

Despite the powerful structural and institutional factors reinforcing the traditional environmental policy paradigm, policy change is not impossible. Pressure from environmental groups and movements as well as demands from the citizens has compelled governments to change their approach and policies. In recent years, nearly all governments have introduced new measures to improve environmental protection. However, there is not much evidence of radical changes, and thus the changes might be too slow to deal with the problems adequately and in time (e.g. in the case of climate change).

Questions: Is industry the main villain in environmental policy? Does the capitalist state present insuperable barriers to a co-ordinated environmental policy?
**WEEK 2: Green Political Thought**

In this section we will look at the philosophical foundations of green activism. The starting point will be the green critique of our current economic order (capitalism) and its underlying political order. In the other lectures the central themes of the ideology of Ecologism will be introduced, and we will learn what the difference between shallow ecologism and deep ecologism is.

**The key concepts of this section are:**
- capitalism and the consumer society
- (neo)liberalism
- ecologism
- shallow ecologism and deep ecologism
- four pillars of green politics

Questions to consider:
1. Has our current economic system influenced how we live our lives today?
2. Does being environmental conscious require one to be a post-materialist?
3. Would we and the environment be better off if we adopted the ideology of ecologism? Does ecologism have realistic goals?

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*Lecture 4: The green critique of our current economic and political order*

The passages below have been excerpted from “Love & Its Disintegration In Western Society,” a chapter in Erich Fromm’s *The Art of Loving* (New York: Harper & Row, 1956), pp. 2-3, 72-74.

“Our whole culture is based on the appetite for buying, on the idea of a mutually favorable exchange. Modern man's happiness consists in the thrill of looking at the shop windows, and in buying all that he can afford to buy, either for cash or on installments. He (or she) looks at people in a similar way. [...] In a culture in which the marketing orientation prevails, and in which material success is the outstanding value, there is little reason to be surprised that human love relations follow the same pattern of exchange which governs the commodity and the labor market..."

“Modern capitalism needs men who cooperate smoothly and in large numbers; who want to consume more and more; and whose tastes are standardized and can be easily influenced and anticipated. It needs men who feel free and independent, not subject to any authority or principle or conscience – yet willing to be commanded, to do what is expected of them, to fit into the social machine without friction; who can be guided without force, led without leaders, prompted without aim – except the one to make good, to be on the move, to function, to go ahead.

“What is the outcome? Modern man is alienated from himself, from his fellow men, and from nature.”

(Please note that ‘man’ here stands for ‘human’, i.e. it refers to both men and women.)
Modernity and industrialisation: human progress?
The “modern” world exposed people’s faith in (human) progress. Progress as determinism so characteristic of modernity is rooted in economic thinking and a devotion to technological “improvements”. Capitalism has served this notion very well, since it is built on constant growth. Economists develop theoretical models in which they make several assumptions about the conditions in which the model can work (which obviously are not existent like this in reality). Then they take their model and apply it one to one to the real world.

Jaques Ellul argued that our fixation on technology has not only led to a deterioration of democracy and a one-sided understanding of the world, but: “[…] all that makes social groups possible – myths, beliefs, laws, morality – is reduced to nothing by technical growth. For technique has become the paradigm for all action, furnishing to any organization or process both its ontology and its underlying logic.”

This explains why these (economic) models are doomed to fail in the long run, no matter if it’s capitalism or socialism. What the theorists forget to calculate are the costs of steady economic growth to the environment. According to liberalism, and especially utilitarianism, we as humans have the right and even the duty to subjugate the world to serve our progress and well-being by exploiting its natural resources. But they forgot that the Earth has not unlimited resources. Economic degradation, global warming and climate change are the consequences of our hunger for natural resources – resources necessary to drive the economic growth.

The economy in a capitalist system
In this section we will learn about green thinkers and green ideas, particularly how they critique the current economic and political system and what solutions they suggest. We will start by an overview of how our capitalist economy and liberal democracies work, to understand what has inspired green political thought.

Since we live in a consumer society, one of the key themes of environmental politics is the critique of (excessive) material consumption. Thus, not only the question of the distribution of resources, but also the questions of what is being produced?, how? and why? are important. The basis of contemporary capitalist societies is the creation of profit through the satisfaction of ever-increasing wants. This brings us to a key distinction in environmentalist thought: wants versus needs. Wants are subjective desires often manufactured in us as consumers through forms of peer pressure and advertising. Think for instance of what it means to ‘be successful’. How would you tell a successful person – often by the material goods they possess – car, house, etc. The job of advertisers is to help create a sense of ‘want’, often by making us feel inferior for not having the right body or possessions or beer. Without creating wants, capitalists would struggle to find new things to sell to the wealthy who have all their needs met many times over (thus “new markets” need to be
found/created). Needs on the other hand, are more objective things that every human requires to survive and thrive. These are basic things like food, water, shelter, etc. There is thus a close relationship between the notion of needs and human rights. For many environmentalists a sustainable (economic) development would be one based on needs rather than wants, but this brings them into conflict with consumer capitalism. Most environmental conscious people are therefore “post-materialists”. Postmaterialism is the theory that, as material affluence spreads, ‘quality of life’ issues and concerns tend to replace material ones, fundamentally changing the political culture and value of industrialised countries.

**Capitalism versus Sustainability?**

Capitalist economies tend to be linear. Resources (like coal) are used, products (like electricity) produced and consumed, but with waste left over (smoke) which is often disposed of into the environment causing pollution. Air pollution in turn contributes to global warming. Environmentalists argue that as economies grow so these problems become worse and so we need to rethink the notion of endless growth as a good thing. Rather we need to start thinking of a more circular and smaller economic process. Products should be more durable and when their initial use is over they should be recycled and re-used in other production processes. This would cause less pollution and make economies more sustainable. Importantly, the major issue here is not so much recycling as the reduction of consumption. Recycling can help make capitalist economies less damaging but reducing consumption is the key to long-term sustainability. Following this, is then sustainable growth or sustainable development the answer? Independent scientist and environmentalist James Lovelock takes a radical position. He argues that “growth is not sustainable”, that there must be de-growth and that there can be no development. But would that be a viable option for the (present) humankind?

**Capitalism and political liberalism**

We have learned that capitalism can only blossom properly in combination with liberal democracy, which ensures the free market and the protection of private property (the two main prerequisites for the existence of capitalism). Thus, before we can turn to critiques of this system, we must understand what its main assumptions are.

All forms of liberalism enclose the central themes of the individual, freedom, reason, justice as well as toleration and diversity. The freedom of the individual to pursue his or her goals is a theme which runs throughout liberalism. The economy is a vital part of civil society for liberals who prefer a market or capitalist economic order which is based on property, competition and material incentives. Liberals view property ownership as natural and necessary and believe in a self-regulating market economy. Its latest spawn was neoliberalism that rose worldwide since the 1970s and emphasised de-regulation of the economy and privatisation. This in turn accelerated the speed of globalisation and the ‘rule of global capital’, with negative consequences not only for the poor of the world but also the environment (just think about the vast quantities of goods that are shipped all around the world on a daily basis).

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Lecture 5: Green political theory: Ecologism

History and definition of Ecologism
The origins of the term ecology lie in biology and were coined by the German zoologist Ernst Haeckel in 1866. It is derived from the Greek word oikos which means household or habitat. From the beginning of the 20th century it has been used to name a branch of biology that studied the relationship amongst living organisms and their environment. Then it was more and more turned into a political term because it was adopted and used by the growing green movement, especially from the 1960s on. Nevertheless, there has been confusion about what exactly the terms green, environmentalism and ecologism stand for. From the 1950s the term green had been used to express sympathy for environmental issues or projects. It has later been used in the naming of environmental parties, with the German Greens (Die Grünen) being the first in 1980. The term environmentalism has also been used from the 1950s and encompasses a wide field of beliefs – scientific, religious, economic and political – that are concerned with the understanding of human life in context of the natural world. The problem of environmentalism in terms of ideology is that it mostly stands for a moderate or reformist approach that seeks solutions for the environmental crisis but without fundamentally questioning conventional assumptions about the natural world. Ecologism on the other hand provides a radically different view on the relationship between human beings and the natural world.

Therefore it is essential to understand what the term ‘ecologism’ stands for to avoid further confusion about the correct name of the ‘green’ ideology, whether it is ‘ecologism’ or ‘environmentalism’. Andrew Dobson’s book Green Political Thought seeks to bring some clarity into this debate. He develops a theoretical framework for green ideology and explains the difference of ecologism and environmentalism as follows:

“environmentalism argues for a managerial approach to environmental problems, secure in the belief that they can be solved without fundamental changes in present values or patterns of production and consumption, and ecologism holds that a sustainable and fulfilling existence presupposes radical changes in our relationship with the non-human natural world, and in our mode of social and political life.”

Only a theory that is radically different from any other has the ‘right’ to be called an ideology on its own. Therefore Dobson argues that environmentalism is just an adjusted view of the human–nature relationship within the existing (economic) system and hence lacks the major characteristic of an ideology. Consequently only ecologism, which has a revolutionary approach and includes a radical new worldview and provides solutions for an alternative organisation, can be labelled as ideology. Fundamental for the distinction between these two forms of the environmental movement is the work of the Norwegian philosopher Arne Naess (in English also spelt ‘Naess’), who in 1973 coined the terms shallow ecologism (environmentalism) and deep ecologism (ecologism). Simply put, environmentalists want to achieve their goals within an anthropocentric framework, whereas deep ecologists postulate a radical new – an ecocentric – approach. Some of the tensions between these two forms of ecologism will be explained below in more detail in their different view on the various green key themes.

There are diverse opinions about the origins of ecologism, but it was foremost a reaction to the process of industrialisation. It shares this beginning with liberalism and socialism but these three ideologies drew quite antagonistic conclusions about how to respond to this process of modernisation. In the late 20th century industrialisation and urbanisation were intensified which resulted in the growth of ecologism. It was driven by environmental concerns, in particular the fear that economic
growth threatens both the survival of the human race and the planet it lives on. Milestones in expressing this fear have for example been the ( unofficial) UN report *Only One Earth* (1972) and especially the Club of Rome’s report *The Limits to Growth* in the same year. In this time also new activist pressure groups formed themselves, for example ‘Greenpeace’ and ‘Friends of the Earth’ which drew the public’s attention to issues like the dangers of nuclear power or pollution. Together with older groups like the WWF a more and more powerful environmental movement emerged. Although the environmental movement emerged out of the concern about the natural world, ecologists do not see themselves as a single issue lobby group. And as I will show in the next section, they are not since they are concerned with a wide range of issues and have developed a completely new set of concepts and values to understand and explain the world: “Ecologism stands apart from traditional political creeds because it starts from an examination of what they have tended to ignore: the interrelationships that bind humans to all living organisms and more broadly, to the ‘web of life’.”

**Central themes and key concepts**

Ecologism is radically different from all other major ideologies as it criticises the starting points of conventional political thought. Ecologists argue that the major flaw of traditional doctrines and ideologies is their anthropocentric (human-centred) view. They falsely see humans as the centrepiece of existence in their what David Ehrenfeld called ‘arrogance of humanism’. Ideas like liberalism, socialism, feminism and nationalism conduct their analyses based on different notions of the human being and social groups, namely individual, social class, gender or nation. The central values of these ideologies correspond with these notions about the human being and reflect their needs – liberty, equality, justice and order. Ecologists on the other side believe that this focus on human beings has disturbed and damaged the relationship between the human species and its natural environment. Therefore ecologists turned to a new style of politics which does not build on a theory about mankind and its needs, but on a view of nature as a network of relationships between all living species – including the human species – and their natural environment: “Humankind no longer occupies centre stage, but is regarded as an inseparable part of nature.”

Thus, humans must stop to view the earth just as a resource that they can exploit through science and technology to satisfy their needs. Consequently, the central themes of ecologism are ecology, holism, sustainability, environmental ethics and self-actualisation.

**Ecology**

At the heart of all forms of green thought lies ecology, which means the study of organisms ‘in their habitats’. The characteristic of all ecosystems – consisting of living and non-living elements – is that through a system of self-regulation they try to achieve a state of harmony or balance. Small ecosystems form a web of larger ones and all of these make up the global ecosystem, also called ‘ecosphere’ or ‘biosphere’. The development of scientific ecology fundamentally changed our understanding of the natural world and the place of humans within it – that they are certainly not the ‘masters of nature’. This view is important when looking at the rise of green thinking in the second half of the 20th century. For ecologists, there is no doubt that the prospect of environmental disaster stems from mankind’s blind pursuit of material wealth, which disturbed the ‘balance of nature’. Ecologism therefore gives a radically new view on nature and the place of human beings within it, which is ecocentric (nature-centred) rather than anthropocentric. Whereas green thinkers have this starting point in common, their conclusions are quite different. As indicated above, very central here is Arne Naess’ distinction between ‘shallow ecology’ and ‘deep ecology’. Shallow ecologists acknowledge the need to preserve nature, but as a means to sustain human life. Deep ecologists on the other hand accuse shallow ecologists of just adjusting the anthropocentric system to suit the well-being of people in the developed countries. Deep ecology rejects this and instead “[…] advances the more challenging idea that the purpose of
human life is to help sustain nature, not the other way around.” Naess termed this radical new worldview ‘ecosophy’, which ‘humanistic’ (shallow) ecologists in turn criticised for presenting unrealistic and unappealing solutions to mankind.

**Holism**
The second crucial feature of ecologism is the concept of holism. I have indicated before that the other major ideologies have basically viewed nature as an economic resource that has to serve the human masters of the world, but have never seriously analysed the relationship between humankind and nature. The term ‘holism’ does not have its origins in the green movement but was coined in 1926 by Jan Smuts, a Boer general and twice prime minister of South Africa. With this term he wanted to describe that the natural world could only be understood as a whole and not through its individual parts. For him, science had the problem of reductionism, i.e. trying to explain separated parts rather than the whole. Holism on the other hand emphasises that ‘the whole’ is more important than its individual parts.

Modern science, especially the development of ‘new physics’ starting with the works of Albert Einstein, has abandoned the idea of objective knowledge and replaced it with the ‘uncertainty principle’. This has the potential to substitute the redundant mechanistic and reductionist worldview. An alternative to this search of new concepts has been religion, particularly eastern mysticism like Hinduism, Taoism and (Zen) Buddhism. These religions have for long preached the oneness of things and emphasised a good relationship between humans and their natural environment. However, what influenced modern green thinking most was a referral to pre-Christian spiritual ideas where all things including the Earth itself were regarded to be alive. This ‘Mother Earth’ thinking has been adopted and developed by James Lovelock in *Gaia: A New Look at Life on Earth* (1979). ‘Gaia’ is the name of the Greek goddess of the Earth and Lovelock claimed that Planet Earth is a living organism (with all the implied consequences when an organism gets seriously disturbed). This idea of Gaia transformed into an ‘ecological ideology’ where humans are obliged to respect and conserve the natural world. According to Lovelock, the species that prospered were regulated by Gaia, “[…] while any species that poses a threat to the delicate balance of Gaia, as humans currently do, is likely to be extinguished.”

**Sustainability**
A further key to ecologism is the concept of sustainability. The conventional political creeds which are more or less expressed by all mainstream parties hold that human life has unlimited possibilities for material growth and prosperity. Ecologists are opposing this ‘growth mania’ (Herman Daly, 1974) because they consider it to be the wrong way and the primary cause of environmental disaster. A result of this view is that green thinkers do not distinguish between capitalism and communism since both represent industrialism with its negative effects. Thus, there is a need in green economics to rethink the nature and purpose of economic activities, especially regarding the resources of the Earth. It builds on the notion that resources are limited and therefore it is not possible to pursue growth forever. The best example is the so-called ‘energy crisis’ that stems from industrialisation and ‘development’ built on the exploitation of fossil fuels like coal, oil and gas – which are non-renewable. Their excessive use to foster economic growth threatens the fragile balance of the Earth and the processes that sustain life. Moreover, once they are used up they cannot be replaced, a fact that has largely been ignored, particularly by the industrialised West.

However, ecological economics do not only criticise but also provide some solutions to these problems. At the core of any solution is the belief that the human species can only survive and prosper if it acknowledges to be only one of many elements in the biosphere. Only an intact biosphere can
sustain human life and therefore human policies and actions must be guided by the principle of ‘sustainability’ to maintain the capacity of the system. In the example of energy, the use of fossil fuels must be cut back dramatically and replaced by renewable energy such as solar or wind power in the long term. But sustainability encompasses more than a ‘wiser’ use of natural resources; it aims at a new thinking about economic activities. The environmental movement here draws on E. F. Schumacher’s idea of ‘Buddhist economics’ explained in his book *Small is Beautiful* (1973). Ecologists adopted this idea in a way that economics in the future should be there “[…] to serve humanity, rather than enslave it.” The views of shallow and deep ecologists about economic growth are conflicting. Whereas the former ones support the idea of ‘sustainable growth’, the latter ones reject it and instead postulate ‘zero growth’ policies and a post-industrial age with a ‘return to nature’.

It is important to note in this context that the concept of sustainable development – which is based on the idea of sustainability – is not limited to the sphere of economics, but also encompasses environmental and social sustainability. One speaks here of the three dimensions (or pillars) of sustainable development.

**Environmental ethics**

A new way of thinking is also expressed in environmental ethics since conventional ethical systems are anthropocentric as well. In utilitarianism for example, the natural world has only instrumental value for the human being as ‘utility maximisers’, which can be found in a similar way in the labour theories of thinkers like John Locke or Karl Marx. This view conflicts with a central ethical issue, which is the question of our moral obligations towards future generations. For example, why should people today worry about the depletion of fossil fuels or the accumulation of nuclear waste since they will not live any more when the problems become acute? Human beings tend to live in the today rather than in the tomorrow. Thus, what might be in the best interest of humans today to ensure growth and prosperity can have very negative consequences for the coming generations. This forces ecologists to think of the human species as a whole, i.e. not to distinguish between the present and future generations. This in turn implies a responsibility of the living not to endanger the fundamentals that have to sustain the yet to be born. In the environmental ethics there are also approaches that seeks to apply moral standards and values developed for human beings to other species and organisms, expressed for example by activists of animal rights (one could think here of organisations such as PETA).

**Self-actualisation**

Finally, self-actualisation is the other great theme in green philosophy. The question that lies behind it is *what do humans strive and live for?* As explained above, ecologists reject the human attitude of self-interestedness and material greed and therefore looked for an alternative philosophy which relates personal fulfilment to a balance with nature. Self-actualisation has its roots in postmaterialism, which is loosely based on Abraham Maslow’s ‘hierarchy of needs’. It basically values the need for esteem and self-actualisation higher than material or economic needs. If their livelihood is secured, people will act less egoistically and turn to ‘quality of life’ issues. Some of the themes they are concerned with find their expression in feminism, world peace, racial harmony, ecology and animal rights: “In this sense, ecologism can be seen as one of the ‘new’ social movements that sprang up in the second half of the twentieth century, broadly committed to a new left agenda that rejected the hierarchical, materialist and patriarchal values of conventional society.” Nonetheless, ecologism is quite different from these other movements in the way that it exposes more radical and innovative thinking about the nature of human sensibilities and self-realisation. Here all ecologists agree that human development has become dangerously unbalanced and that the ‘know-how’ acquired by humanity – for example to reach material wealth – is not accompanied at the same level
by the ‘know-why’. Like in the other described fields, deep and shallow ecologists also differ in their search for wisdom. Here the shallow ecologists reject the spiritual dimension of deep ecology and its referral to religious mysticism and New Age ideas.37

Green ideas have influenced politics in various ways and inspired other political creeds. Ecologism, like nationalism and feminism, can therefore be viewed as a cross-cutting ideology. Some of its ideas have for instance been adopted by fascists, socialists, anarchists and feminists. Out of this emerged some sub-traditions within ecologism, for example right-wing ecologism, ecosocialism, eco-anarchism and ecofeminism. Moreover, green philosophy has been incorporated in the programmes of green parties and guides their action. This is exemplified by the ‘four pillars’, which represent the core principles guiding the politics of the German green party (see box).

The ‘four pillars’ of green politics

In their 1983 political programme Die Grünen, the German green party, named four core principles of politics which have subsequently been adopted by most green parties in the world:

1. ecological responsibility
2. grassroots democracy
3. social justice
4. non-violence

The concept of ecological responsibility, or sustainability, is informed by the two core ideas of ecologism: (1) the need to recast human-nature relations; and (2) the limits to growth. However, it is less clear how the practical political commitments to grassroots democracy, social justice and non-violence reflect these two ideas. If the primary aim of ecologism is to achieve a sustainable society, does it really matter how we get there and what the green polity looks like?

The big impacts of ecologist ideas can be observed in the shifts in agriculture and marketing. The organic food sector is growing, especially in Western Europe. Additionally there are more ‘fair trade’ products sold in so-called ‘One-World Shops’ which pay adequate prices to the producers in the developing countries. It is about a responsible use of natural resources and against exploitation of the poor. People who buy these products want to have a good conscience towards nature and this refers to environmental ethics. Moreover, many companies started to advertise their products as being a ‘local product’ which is ‘environmentally friendly’, coming from ‘sustainable production’, using ‘recycled materials’ and being packed in ‘biodegradable packs’. The truth behind those claims might be different, but it is an important first step in a changing mindset. It shows that people (at least those in relative material security) tend to buy a more ‘ethical correct’ product if quality and price are at the same level as conventional products.
WEEK 3: Environmental groups, movements, organisations and parties

Week 3 deals with the questions of why, when and how environmental groups, movements, organisations and parties formed (with a focus on North America and Europe), and what their impact on environmental politics was. It also includes a case study on the emergence of Die Grünen, the German green party who had a vanguard role and strongly influenced the formation of other green parties around the world.

The key concepts of this section are:
- pressure/interest group
- two waves of environmentalism
- non-governmental organisation (NGO)
- political party
- green parties

Questions to consider:
1. Why have environmental groups, esp. NGOs, formed in large numbers since the 1960s, and why are there still new groups being launched today?
2. Was the development of environmental movements in the North different from the Global South?
3. Why are green parties an established feature of politics in some countries like Germany, whereas they are virtually non-existent in countries like the USA and South Africa?

Lecture 7: The Environmental Movement

Environmental pressure groups (EPGs) are probably the most visible expression of contemporary environmental concern. The publicity-seeking stunts and daring deeds of the direct action protesters, whether tiny Greenpeace dinghies bobbing on the waves alongside ocean whalers or anti-road protesters perched at the top of trees, have attracted enormous public attention. Most pressure group activity, however, involves rather more conventional political activities such as lobbying and education. Thus, pressure groups are also called interest, advocacy or lobby groups. They want to influence public opinion and/or policy-making. The rapid growth of the environmental movement since the mid-1980s has provided the resources for some groups to become highly professional organisations and to win regular access to political elites. Thus, NGOs are professionalised interest or pressure groups. There is little doubt that environmental groups have been the most effective movement fighting for progressive environmental change.

Some International Environmental NGOs
- 350.org
- BirdLife International
- Conservation International
- Earth First!
- Fauna and Flora International
- Friends of the Earth
- Global Footprint Network
- GAWA: Green Actors of West Africa
- Greenpeace
- PATT: Plant A Tree Today Foundation
- Robin Wood (Germany)
- RSPB: Royal Society for the Protection of Birds (UK)
- Sierra Club (USA)
- WWF: World Wide Fund for Nature
particularly in those countries such as the USA and UK where there is no successful green party and established parties have been largely unresponsive to environmental problems. Nevertheless, this process of institutionalisation involved compromises that blunted the radical edge of large groups such as Friends of the Earth and Greenpeace, and contributed to the resurgence of grassroots environmental groups during the 1990s, including the UK anti-roads protesters and the US environmental justice movement. Thus the environmental movement has confronted a dilemma familiar to many other political movements: should it maintain the reformist insider strategy of pressure politics, or should it pursue a radical outsider strategy of confrontational protest politics? Moreover, large NGOs like the WWF have been criticised for accepting donations from and cooperating too close with large corporations (e.g. oil firms like Shell and ExxonMobile) and thereby “greenwashing” their activities.

The environmental movement is extraordinarily diverse, encompassing traditional conservation organisations (including RSPB and the Sierra Club), international NGOs (Friends of the Earth and Greenpeace), radical direct action groups (Earth First! and Robin Wood) and a mass of local grassroots groups. Indeed, some observers argue that it is wrong to talk of a single environmental movement because the differences between the groups are more significant than the similarities. By contrast, others view the movement as an all-inclusive “green rainbow”, in which differences between groups simply reflect tendencies along a continuum between a conservation orientation and an ecological orientation – ideal types that broadly correspond to the two historical waves of environmentalism.

**History of the Environmental Movement**

The following text is taken from Leslie Paul Thiele’s “Environmental Movements: The History of the Environmental Movement, Public Support and Prospects for the Future, nongovernmental organizations.” It focuses mainly on the history of the environmental movement in North America, but nonetheless provides a good overview of the two waves of environmentalism:

As the environmental dangers of industrialization became evident in the nineteenth century, the popularity of nature writing and natural history grew in America and Europe. In the late 1820s, John James Audubon began publishing his *Birds of America*. Ralph Waldo Emerson wrote his famous essay “Nature” in 1836. In 1854, Henry David Thoreau published *Walden*, America's most famous tribute to the harmony of humanity and nature. In the early 1870s, the first popular magazines advocating nature conservation were published. By the late 1880s, the goal of protecting nature and conserving natural resources was gaining public and governmental support. A conservation movement formed. Early conservationists are often divided into two categories: resource conservationists and nature preservationists. Resource conservationists promoted the efficient management of natural resources for human benefit, with an eye to the welfare of future generations. Preservationists focused on the intrinsic value of nature, arguing for the preservation of wilderness for its own sake.

The first citizen conservationists were members of regional mountaineering or birdwatching clubs. These citizen groups had both resource conservationist and preservationist tendencies. They concerned themselves not only with the efficient management of natural
resources for human use and recreation, but with the preservation of wildlife for its aesthetic and spiritual benefits. George Bird Grinnell, editor and publisher of *Forest and Stream*, was the founder in 1886 of America's first popular conservation organization, the Audubon Society. Its primary mission was the protection of plumage birds from the millinery industry and the protection of certain game birds from unregulated sport hunting. Many women, including former suffragette Rosalie Edge, played an important role in maintaining the organization's preservationist orientation. In Europe, similar efforts to protect wildlife, forests, and wilderness were well under way, particularly in Britain.

The most famous preservationist of the time was John Muir (1838–1914), a Scottish-born immigrant who spent much of his life hiking and climbing in America's wilds (see picture with Theodore Roosevelt on the left). Muir founded the Sierra Club in 1892 and remained its president until his death. Muir and his fellow Sierrans promoted recreational enjoyment of the forests, canyons, and mountains of California's Sierra Nevada and opposed extensive logging and livestock grazing.

Resource conservationists, maintaining anthropocentric (human-centered) values, had the upper hand in the first wave of environmentalism. They formed the backbone of the early conservation movement and were most persuasive in government circles. Yet preservationists, with biocentric (nature-centered) perspectives, were not without influence. Moreover, because the natural resources that early conservationists aimed to husband often included wildlands and wildlife, their policies, if not their principles, frequently dovetailed with those of preservationists.

Aldo Leopold (1887–1948), a U.S. Forest Service employee, exemplified the tension between anthropocentric and bio-centric perspectives within the early conservation movement. After observing the pitfalls of short-sighted forestry practices and predator-extirpation programs, Leopold came to understand the human economy as part of an overarching ecological balance. He co-founded the Wilderness Society with Bob Marshall in 1936. In *A Sand County Almanac*, published posthumously in 1949, Leopold developed the first formalized environmental ethic. Leopold's “land ethic” extended moral concern to the biotic community as a whole.

**The second wave of environmentalism**

In the 1960s, and more markedly by the early 1970s, a second wave of environmentalism arose. Previously, both resource conservationists and nature preservationists had placed their activities under the rubric of nature conservation. The words “environment” and “environmentalism” were not yet in general circulation. By the mid-1970s, talk of environmental protection was widespread in the media, in schools, and in the halls of government.

Not unlike their predecessors, second-wave environmentalists were concerned with managing natural resources efficiently to satisfy human needs, but they were also troubled by the growth of these needs and the ecological costs of satisfying them on a global scale. With mounting unease, the general public learned that humankind was becoming the victim of its own environmental abuses. Consumerism and the mass-production of goods had yielded a tremendous increase in litter. Waste-disposal and energy-resource problems were mounting. Rapid suburban development led to the paving over of green spaces. Urban air quality was deteriorating noticeably; many cities suffered from deadly inversions that trapped heavily polluted smog. Oceans were often used as dumping grounds, and many streams and rivers were clogged with effluent that made their waters undrinkable and frequently unfit for swimming or fishing. The public began to worry about the planetary effects of accelerating human production and reproduction.

The rapid growth of second-wave environmentalism was sparked by the publication of Rachel Carson's *Silent Spring* (1962). In scrupulous detail, Carson documented the widespread use of pesticides and their devastating effects on bird populations.
America, Carson predicted, would soon face a spring wholly deprived of its beloved avian singers. *Silent Spring* also foretold a time when chemicals recklessly introduced into nature in the pursuit of profit would take a significant human toll. After reading *Silent Spring*, President Kennedy appointed a special panel of the Science Advisory Committee to study pesticide use. The panel largely corroborated Carson's findings. A group of private citizens inspired by Carson's work demonstrated that the use of the pesticide DDT to control mosquitoes was the cause of a sharp decline in the osprey populations on Long Island. They founded the *Environmental Defense Fund* (EDF). By 1972, the EDF had succeeded in having the use of DDT banned nationwide.

In 1968, Paul R. Ehrlich published *The Population Bomb*. It quickly became a best seller. Ehrlich argued that overpopulation was the chief obstacle to resolving many of the world's most pressing economic and ecological problems. He prophesied that humankind would breed itself into oblivion. After publishing his book, Ehrlich founded Zero Population Growth, an organization with a mandate to stem the tide of human numbers.

Widespread concern about environmental degradation in the United States and the growth in the world's population burst into a true mass movement in 1970. On April 22 of that year, the first Earth Day was celebrated. An estimated twenty million Americans participated. In the following year, biologist Barry Commoner accomplished for the issue of technology what Ehrlich had achieved for population. In *The Closing Circle* (1971), Commoner raised concerns about the social and ecological effects of a centralized, technological way of life. Commoner argued that ecological devastation was directly tied to the way society was organized and the manner in which its productive capacities were designed.

Employing complex computer-aided analyses, the authors of *The Limits to Growth* (1972) brought overconsumption, the third agent of environmental degradation, to the public eye. This detailed study described the accelerating rate of natural resource depletion that modern technology, increasing human numbers, and rapid resource consumption had produced. If growth trends in world population, industrialization, food production, pollution, and resource depletion continued unabated, its authors predicted, the planetary limits to growth would be reached within the next one hundred years, with catastrophic results. While some predictions proved exaggerated, public concern for the environment grew steadily in light of such forecasts and in the wake of the widely observed degradation of the air, water, and land.

Between 1901 and 1960, an average of three conservation groups formed each year in the United States. Between 1961 and 1980, an average of 18 new groups were founded each year. These organizations expanded the environmental agenda and radicalized its operations. In 1971, Greenpeace was formed. Originally organized in Canada to oppose nuclear testing carried out by the United States off the coast of Alaska, Greenpeace quickly became involved in a wide array of environmental issues, including well-known campaigns to end seal hunting and whaling. Greenpeace inaugurated an era of environmental “direct action.” Although eschewing violence and the destruction of property, Greenpeace members frequently engaged in civil disobedience to publicize or prevent environmental misdeeds. Activists climbed smokestacks to release banners decrying pollution, positioned their rubber dinghies between whales and harpoon-armed whaling ships, and sailed into nuclear testing zones. More radical groups such as the Sea Shepherd Conservation Society and Earth First! engaged in ecological sabotage—sinking whaling ships or destroying tree-harvesting machinery—to protect wildlife and wilderness.

The vast majority of environmental groups adopted legal means to protect the environment and gained widespread public support for their efforts. Indeed, by the early 1980s certain segments of the environmental movement were actively courted by business interests and the political establishment. Environmentalism was no longer a “fringe” movement; it had become mainstream. Many of the larger environmental groups, with memberships in the millions and annual budgets over U.S.$100 million, were now run by professional administrators who controlled entire departments of scientists, lobbyists, lawyers, public relations personnel, fundraisers, and membership recruiters. Many grassroots environmentalists objected to the national organizations’ professionalism, commercialism, and reliance on corporate donations. Beginning in the late 1980s, the mainstream groups were also criticized for catering exclusively to the needs and concerns of the middle and upper
classes. In the United States and many other countries, an “environmental justice” movement formed to challenge the disproportionate suffering of minorities and the poor from the effects of environmental degradation. In the 1990s and 2000s, many environmental groups adopted the broad goal of sustainability as their mandate. Sustainability links the pursuit of social justice with ecological preservation and environmental health, while paying heed to the requirements of a human economy.

<table>
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<tr>
<th>Three stages of development in Southern environmental movements</th>
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<tr>
<td><strong>Stage 1: 1960s</strong></td>
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<td>The first development decade in the South brought optimism. Northern-style growth and development were the goals. So much so, that there was little movement opposition within the countries of the South. Movements from outside the South – mainly in the form of large NGOs – occasionally entered the political sphere.</td>
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| **Stage 2: 1970s** |
| During this period, environmental movements emerged in the South. Again, these were dominated by some key NGOs, e.g. the Green Belt Movement in Kenya, the Environment Liaison Centre International, Environment and Development Action in the Third World, and Sahabat Alam Malaysia. Few movement participants opposed the Northern development ideology, but they fought for ‘people’s development’ (another development), not governments’ or multinationals’ development. This type of development shares many similarities with the political ecology movements in the North, particularly Western Europe. |

| **Stage 1: 1980s to present day** |
| During this period, movements split into two categories. After a period pf emphasising local and grass-roots development in the 1970s, many networks in these movements began to collaborate with the government and international agencies again, as in the 1960s. Many coalitions of grass-root groups and local NGOs formed umbrella coalitions e.g. Asia Pacific People’s Environmental Network, African NGOs Environmental Network, the Asian NGO Coalition etc. Many of these powerful coalitions occasionally bypass government and negotiate directly with international aid agencies. The other category was the development of environmental protest movements, very similar to the political ecology movements of the North. These networks criticised Northern development schemes. They criticised Northern science and technology, the industrial practices of transnational corporations, national governments, Northern governments, and international aid agencies. |

(Adapted from Timothy Doyle and Doug McEachern, *Environment and Politics*, p. 78)

**Western European environmental movements**

Some of the most dramatic, well-publicised and much discussed environmental movements are to be found in Western Europe. There are two major kinds: (1) the very traditional nature conservation movement, and (2) the political ecology and anti-nuclear movements.

There is a major difference between the kind of environmental politics embraced by these two different types of movements. The nature conservation movement sought ‘protection within the existing economic order’. This movement proposes reform by making the established system ‘greener’. The political ecology and anti-nuclear movements on the other hand demanded systemic change, placing ecological and social objectives above economic concerns.

The nature conservation movement accepted current distribution patterns of both power and economic resources. Both the political ecology and anti-nuclear movements argued for resource con-
The difference between NGOs and political parties
There are two distinct categories of environmental interest groups. Before we move on to the case study, it is important that you understand the difference between a NGO and a political party. The acronym NGO stands for non-governmental organisation. It is a voluntary group of individuals or organisations that is formed to provide services or to advocate a public policy. NGOs are independent and NOT part of governments. Although some NGOs are for-profit corporations, the vast majority are non-profit organisations (NPOs). The large NGOs to some extent operate like corporations, having CEOs, salaried staff and making investments (usually for a ‘good cause’).
A political party on the other hand is a group of persons organised to acquire and exercise political power. Thus, a political party is a political organisation that typically seeks to influence government policy, usually by nominating their own candidates and trying to seat them in political office by participating in elections.
Thus, the main difference between the two is that NGOs do not participate in elections and do not form governments, but political parties do!

Lecture 8: The emergence and development of Green Parties worldwide

The term Green Party refers to a worldwide group of political parties with a common set of core values and philosophical basis. This, however, has been the result of an extensive process of codifying values that have evolved from several diverse social movements.

The very first Green party – the United Tasmania Group – was formed at a public meeting in Hobart, the state capital of the Australian island state of Tasmania, in March 1972. Two months after the founding of this Australian regional green party, in May 1972, the Values Party – the world’s first national Green party – was established at a meeting at Victoria University in Wellington, the capital of New Zealand. The Values Party contested the 1972 New Zealand general election, putting forward radical new policies such as Zero Economic Growth, Zero Population Growth and abortion, drug and homosexual law reform. These were published in the world’s first Green election manifesto, Blueprint for New Zealand - An Alternative Future.

Over the next three years Green policies were debated, developed and expanded to form the basis of Beyond Tomorrow, the 1975 Values Party manifesto. This was a comprehensive statement of Green politics which was widely distributed overseas and contributed to the development of Green parties elsewhere. Throughout the seventies the Values Party continued to contest elections gaining a small base of sup-
port but failing to make it into parliament (which was only achieved in 1998). The following decade, however, saw a notable decline in the activities of the Values Party as they struggled to define their political orientation. This would only become clear as other green parties developed elsewhere.

Now an established expression, the political term *Green*, a translation of the German word *Grün*, was only coined in the late 1970s. The term *The Greens* for a political party was first used by an electoral alliance with an ecological programme in the Bavarian state elections in 1978. Subsequently it was decided to use this name for the national German Green Party, which was constituted in 1980 and contested its first election the same year. This party emerged in the midst of the social changes sweeping through the west during the 1960s and 1970s. Issues such as women’s equality, nuclear power and nuclear weapons (especially the placing of intermediate range missiles on German soil) and the ecological crisis (esp. pollution) gave rise to social groups that sought to change or transform society. Eventually these groups, under the leadership of some very dedicated and dynamic individuals, coalesced under the flagship *Die Grünen* (The Greens). After some initial success in regional and national elections (see the case study below) in the 1980s, they – just like the Values Party – were faced with increasing difficulties and internal quarrels that most new organisations experience. Lack of a stable organisational structure and conflicts over party philosophy led to open disputes among party members. These problems, coupled with an ill-fated decision to oppose German unification chased away enough electoral support during the 1990 elections to put the Greens under the required 5% threshold, and the Greens lost their parliamentary representation. They have recovered, however, and since the late 1990s they have become more and more successful in elections, even forming coalition governments with other parties.

The third area the Green Party began to develop was in North America. About one month before the 1980 federal election in Canada, 11 candidates, mostly in Atlantic province districts, issued a joint press release declaring that they were running on a common platform which called for a transition to a non-nuclear, conserver society. Although they ran as independents, they unofficially used the name *Small Party* as part of their declaration of unity—a reference to the ‘small is beautiful’ philosophy of E.F Schumacher. This was the most substantial early attempt to answer the call for an ecologically-oriented Canadian political party.

Three years later, North America’s first Green Party was born in British Columbia, and later that same year the Ontario Greens were formed. The birthing process was difficult, with deep divisions between those arguing for a national structure, and those in favour of a process that would build from the regions. Trevor Hancock, the party’s first registered leader, was eager to get Green politics up and running in Canada. However, a more cautious form of anarchism prevailed. Eventually, an uneasy agreement was reached for a federation of regional parties, with strong support for building upwards from the bottom. The *Green Party of Canada* contested its first federal election in September 1984. A little over 1% of Canadians voted Green. Unfortunately, the ongoing discussions about the party's modus operandi became so exhausting that, at one point in the mid-80's, there was a near collapse of the party. It was kept alive—if not particularly active—for almost a decade under the stewardship of the BC Greens.
At the party's 6th annual gathering in Castlegar, BC, in August of 1996, major constitutional amendments were passed, and policy was agreed to in a wide variety of areas. An important step forward was the structuring of a Shadow Cabinet, whose mandate was to create a platform for the next election in 1997. The Castlegar gathering marked the beginning of a new era in Canadian Green history, and a somewhat uneasy one at that. In spite of a concern about the nature of leadership in a decentralized party, the Greens’ first leadership campaign had been underway for the previous six months. Wendy Priesnitz (from Ontario) became the registered leader of the Green Party of Canada. By the 2004 elections they had gathered enough support to gain 4.5% of the vote.

Despite the diversity of these groups, all Green Parties share the vision of a sustainable society and some core values, which have been codified in their election and party manifestos. Their core values are ecological sustainability, justice or social responsibility, democracy and peace. At the heart of their values is a concern for the environment, believing it to be under threat of massive destruction. In addition they believe that conventional politics has failed because its values are fundamentally flawed. As a result they have developed a more radical form of politics that still seeks to work within the legal electoral process while operating by very different values. They believe that humankind depends on the diversity of the natural world for its existence and therefore other species are not expendable.

Similarly, the Earth’s physical resources are finite and living beyond those means is to threaten our future. As a result a sustainable society is imperative. In addition every person should be entitled to basic material security as of right. Our actions should take account of the well-being of other nations and future generations. We should not pursue our well-being to the detriment of theirs. Instead a healthy society is based on voluntary co-operation between empowered individuals in a democratic society, free from discrimination whether based on race, colour, sex, religion, national origin, social origin or any other prejudice.

They emphasise democratic participation and accountability by ensuring that decisions are taken at the closest practical level to those affected by them. Non-violent solutions to conflict situations, which take into account the interests of minorities and future generations in order to achieve lasting settlements, are always preferable. The success of a society cannot be measured by narrow economic indicators, but should take account of factors affecting the quality of life for all people: personal freedom, social equity, health, happiness and human fulfilment (for more detail on these values you can go back to the section on green ideology).

While the Green Party is first and foremost a political party, it does not believe that the electoral process is the only way to bring about change. It also involves itself in other forms of protest as long as these do not contradict any of its core values.

To some extent the Green Party is misunderstood in global politics. Their concern goes beyond simple environmental issues. They have also developed fairly sophisticated political and economic theories. For example they have contributed substantially to the recent anti-globalisation movement. They argue for smaller economies combined with a global concern for education and the environment. This idea is summed up in the slogan ‘Think globally; act locally’. The Green party is also often confused with ‘left’ political parties advocating central control of capital. In contrast some Green parties are significantly right-wing and almost all advocate a separation between public commons and private enterprise.

**Case study: The German Green Party (Bündnis 90/Die Grünen)**

The growing environmental movement was the basis for the formation of NGO’s like Greenpeace that operated outside the political arena of parliaments. The green movement was at first very reluctant to enter ‘conventional’ politics because it did not want to be part of a system it opposed. But as mentioned above, eventually these movements began with the formation of “Green Parties” world-
wide from the 1970s on, with the United Tasmania Group being the first regional and the Values Party being the first national green party.\textsuperscript{41}

However, it was the German Greens (Die Grünen) who made the greatest impact on green politics nationally and globally. Since 1976 green groups participated in local elections in Germany. In 1979 the greens participated as a political group in the first European Parliament elections with the leading candidates Petra Kelly and Herbert Gruhl. They gained 3.2% of the votes, which meant that they received some funds; this was the financial basis for organising a nationwide party. After their formation as a party in January 1980, the electoral life of Die Grünen took shape during 1980-1982 as a result of their winning a few seats in local and state (Länder) campaigns. The first big success came when they gained seats in the Bundestag (the German parliament) in the national parliamentary elections of 1983 when the received 5.6% of the vote. Green electoral politics reached its initial hey day in 1987 when the party received 8.3% of the vote and 44 seats in the Bundestag. Die Grünen introduced a radically new style of politics with their commitment to participatory democracy, leadership rotation and gender equality which heavily upset the conventional parties.\textsuperscript{42} Here some ecologist ideas were finally put in practice in politics. An internal struggle between the Realos and Fundis over party philosophy in the late 1980s and beginning 1990s weakened the party. To use the terms introduced before, the Realos can be labelled as shallow ecologists whereas the Fundis tend more to a deep ecology approach. These disputes and the problems to implement their ideals in day-to-day politics made a number of members leave the party. After the reunification of Germany in 1990 Die Grünen merged with the East German Green Party. Three years later Die Grünen merged with Bündnis 90 (Alliance ’90), an alliance of civil rights groups in East Germany. The party was renamed in Bündnis 90/Die Grünen, but often they are just continued to be called Die Grünen. Together they have been – and still are – writing a success story. Their presentation in the national parliament and even in government gives them a public platform which Green Parties in other countries have yet to achieve. Furthermore, their composition, ideas and radical new understanding of politics put them in a ‘vanguard role’. Many of the Green Parties which emerged in other countries afterwards also build on the “four pillars” that Die Grünen included in their party manifesto and which was to guide their politics: ecological wisdom, grassroots democracy, social justice and peace/non-violence – based on ecologist thinking.\textsuperscript{43}

The greatest success thus far for Bündnis 90/Die Grünen was the victory of the so-called “red-green alliance” in the German national elections of 1998, when they formed a coalition with the SPD (the Social Democratic Party of Germany). In politics, a red-green alliance is an alliance of ‘red’ social-democratic or democratic socialist parties with ‘green’ environmentalist parties. In a parliamentary system a coalition is a government in which several political parties cooperate, especially if there is no single party with a majority in the parliament. Thus, alliances are generally formed to gain the majority in an election.

The electoral success of Die Grünen inspired the green movement worldwide although the party had to swallow some bitter pills. Die Grünen had to adopt a far more realist course when they were elected into government since some of the radical ideas turned out to be very unpractical. This made
some Fundis leave the party, but its successes are more important. For example, they initiated the formulation of a law in 2000 that promotes renewable energy in Germany. The result of this law can be seen now as renewable energy increasingly gains market share on the cost of nuclear energy. Additionally it was their pressure that led to the negotiation of a deadline when all nuclear power plants in Germany have to be switched off. With the election of a conservative/liberal coalition in 2009 the nuclear lobby saw its chance to reverse this agreement and promote nuclear energy as ‘clean energy’. The reaction of the greens was to organise protests against this intended reversal of energy politics. Then in April 2010 the anti-nuclear power movement which is part of the green movement in Germany experienced a great revival with more than 120,000 people demonstrating against the intended prolonged use of this energy source.

In the 2009 federal elections, the party won 10.7% of the votes and 68 out of 622 seats in the Bundestag, their best result in national elections thus far. Then, in the 2011 federal state elections in Baden-Wurttemberg Bündnis 90/Die Grünen for the first time became the second-strongest party in Germany. They received 24.2% of the votes and were able to form a coalition government with the SPD. This also meant that with Winfried Kretschmann (see picture) for the first time a member of the green party was elected governor of a German state (this is similar to premier in South Africa’s provinces).

Furthermore, in the beginning of 2011 the conservative/liberal national government announced the programme for an “Energy Transition”, which was cast in a legislative mold a few months later. It is a policy to transform Germany into a sustainable economy by the means of renewable energy, energy efficiency and sustainable development. The final goal is the abolishment of nuclear, coal and other non renewable energy sources over the next few decades.

The growing number of green parties worldwide led to the formation of the “global greens” in preparation for the UN Rio summit. The “global greens” is a network that links green parties from all continents and builds on the four pillars ecological wisdom, grassroots democracy, social justice and peace/non-violence.

<table>
<thead>
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<th>Make sure you understand the difference:</th>
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<tr>
<td>a <strong>NGO</strong> is an organisation operating independent from government to deliver services or advocate a social/political issue</td>
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WEEK 4: Policy-making at the domestic and international political level

In the last part of the course we will see how green ideas and environmental concerns are put into practice in politics. First, the focus is on how policymakers within a state respond to environmental problems, and then how transboundary problems are tackled by the international community. Two case studies (recycling in South Africa; global protection of the ozone layer) serve to illustrate how laws, regulations, treaties and regimes have been put in place in response to particular problems.

The key concepts of this section are:

- sustainable development
- recycling
- United Nations (UN)
- paradox of international cooperation
- treaties and regimes

Questions to consider:
1. Why is policy change rather slow when it comes to environmental issues?
2. Do you think South Africa can achieve the goal of “zero waste” by 2022?
3. Why do you think have the efforts to protect the ozone layer been successful, whereas the Kyoto Protocol to counter global warming has largely failed?

Lecture 10: Policy-making at the domestic level

The first signs that governments started to be concerned with environmental issues was the creation of a new Ministry of the Environment in some countries from the 1970s on. This categorisation of the environment into a separate policy area on the other hand often also meant marginalisation (see lecture 3).

Since the early 1990s governments have started to change the way the approach environmental issues. Most governments have adopted a more strategic approach that at least points in the direction of (very weak) sustainable development. There have been institutional and administrative reforms which made environmental issues more of a routine, but progress towards environmental governance is still slow.

Another aspect of judging progress towards sustainable development is to examine the policy outputs of (environmental) policymaking. Measuring this is basically asking the questions of what policies (and how many) have been produced, and how successful and effective they have been. A key element in the policymaking and implementation process concerns the choice of the policy instrument by which a government tries to achieve its objectives. Policy instruments should be enforceable, effective and educative. They should change the behaviour of target groups, achieve the stated policy objectives and help spread environmental values throughout society.
In general, there are four types of policy instruments that governments can use to pursue their environmental objectives:

- regulation (“command and control”)
- voluntary action (encourage changing lifestyles of individuals)
- government expenditure (subsidies)
- market-based instruments (“polluter pays principle”)

In practice, these instruments might be mixed to achieve the best possible outcome, as the following case study on recycling will show.

**Case study: Waste management recycling in Germany and South Africa**

**Trash Planet: Germany**

by Marie Look
Published on July 13th, 2009

The Trash Planet series highlights various countries around the world and how they handle their waste.

Germany leads the European nations in recycling, with around 70 percent of the waste the country generates successfully recovered and reused each year. To put that figure into perspective, consider this: In 2007, the U.S. was able to recover only about 33 percent of the waste generated that year. To operate such a successful waste management system nationwide is certainly no small feat, but for the past several years the Germans have made it look easy. So how do they do it?

![Graph of recycling rates](http://maps.grida.no/go/graphic/recycling-rates-for-selected-oecd-countries)

“Recycling is very important in Germany,” says Güseli Aksoy, a 24-year-old mechanical engineering student at the Braunschweig University of Technology. "The people here are very conscientious.”

And while the country’s conscientious waste management strategy requires cooperation from the government, the industry and the citizens, it starts at the very beginning of the waste creation process – with the product manufacturers.

There are three simple components the manufacturers must consider: waste avoidance, waste recovery and environmentally compatible disposal.

By incorporating waste avoidance into industry, much of Germany’s waste management becomes “invisible,” as corporations are forced to re-think every aspect of manufacturing. Packaging, processes and disposal of items are all engineered with recycling and elimination of waste in mind.
Federal Waste Management Policy
In 1996, German lawmakers who were concerned about the country’s growing number of landfills passed the Closed Substance Cycle and Waste Management Act, which requires businesses to eliminate waste production by implementing one or more of the three management strategies.

Waste avoidance is first priority because it encourages companies to design their manufacturing processes and packaging with elimination of wastefulness in mind. Second, waste that can’t be avoided must be recycled or converted into energy. Lastly, waste that can’t be recovered must be disposed of in a way that is environmentally safe.

The concept in which private industries are responsible for eliminating waste – and for covering the costs – is described as the “polluter pays” principle. In other words, those who create the waste are responsible for cleaning up the mess. The U.S. has a “consumer pays” policy, in which waste management is funded by taxpaying citizens.

Germany’s three-point strategy doesn’t apply to just the country’s solid and packaging wastes, but also to liquid, gaseous, hazardous, radioactive and medical wastes. The efforts have been hugely successful; according to the German Federal Statistical Office, between the years 1996 and 2007, the country has reduced its total net waste amount by more than 37.7 million U.S. tons.

The Dual System and The Green Dot Trademark
Many companies had a difficult time complying with all the new standards and recycling laws introduced by the Packaging Ordinance. They decided that they needed to better organize themselves, and so the non-profit organization Duales System Deutschland GmbH (Dual System Germany, or DSD) was created.

Manufacturers pay a fee to become a member of the DSD and are then permitted to print Der Grüne Punkt (the Green Dot) trademark on all their packaging.

Fees are decided based on the material, the weight and the number of items. The DSD also takes into consideration what it will cost to collect, sort, treat and recycle the different materials.

Recycling companies guarantee to accept any and all materials displaying the Green Dot, because the trademark is a symbol that the product’s manufacturer has paid to become a DSD member and promises to comply with Germany’s recycling laws.

Currently, the Green Dot system is used by more than 130,000 companies in 25 European countries (20 EU members and four candidate countries – Turkey, Bulgaria, Romania and Croatia, as well as Norway). PRO Europe, the umbrella organization for European packaging waste management systems, reports that 3.2 million tons (U.S. tons) of Germany’s commercial packaging waste was recovered in 2007. That’s more than 88 percent of all the packaging produced in Germany that year!

But wait, there’s more. DSD reports that the country’s recycling efforts in 2008 not only kept waste out of landfills, but it also avoided an estimated 1.4 million tons of CO2 emissions.

According to a municipal solid waste report by the EPA, in 2007, the U.S. was able to recover only about 43 percent of all the containers and packaging produced that year.

Citizen Responsibility
DSD has made recycling widely available and very convenient for German citizens. Trash bins can be found on street corners, in public parks and other spaces, in the courtyards of apartment buildings, and in all single family homes. These trash containers are usually color-coded and labelled according to what should be placed in them:

Germany distributes bins of different colors for every material. While Germans have to separate their recycling, the system is still very successful.

Yellow bin – packaging
Blue bin – paper and cardboard
White bin – white or clear glass
Brown bin – brown glass
Green bin – green glass
“Bio” bin – leftover food and plant waste

A neighborhood will also likely have receptacles for collecting discarded shoes, clothing items and scrap metal. There are also black bins for any rubbish that doesn’t fit into one of the other categories.

Legally, Germans are not obliged to sort their household waste, but clearly the vast majority of them don’t mind doing it. In fact, many citizens feel so strongly about sorting their trash that they will often help or politely correct foreigners or any others they see who are “doing it wrong.”

[...]

Germans know that when they shop at grocers and many other stores, they are expected to bring their own reusable shopping bag. Some stores do have plastic bags, but they must be purchased by the consumer.

“Nobody even considers using plastic bags when going to the store [in Germany],” says Hochenedel. “You bring your own, or you carry your stuff out in a cart or in your arms. You really see what a difference little things like that can make – there is never garbage on the streets. It’s so clean.”

[...]

Post-Collection Process
So, after all the careful sorting, where does the trash go? The DSD has a plan for that part of waste management, too.

The DSD works with cities and towns to coordinate collection sites and systems around the country. Many local governments hire private contractors to handle their waste management, but these operations are still funded by the Green Dot fees paid by industry members.

After the trash is collected, what it is determines which path it takes. Most items will be transferred directly to a sorting plant, where the recyclable parts are separated from the non-recyclable parts. Materials that go to sorting plants include paper and cardboard, packaging, textiles and shoes, bulky waste, hazardous waste, scrap metal, electronics and batteries.

From a sorting plant, material can travel in many different directions. Paper goes to a paper mill, glass goes to a processing plant and then to a glassworks facility, and clothing goes to second-hand distributors. The majority of items materials will go to either a recycling facility, treatment facility, or both.

Anything that can’t be recycled is responsibly incinerated or undergoes mechanical-biological treatment before being put into a landfill. In the 1970s, Germany had around 50,000 landfills, but now there are fewer than 200, thanks to stricter regulations and a diminished need.

According to the European Environment Agency, in 2006, Germany landfilled only about one percent of the country’s untreated waste. In 2007, the EPA reports that the U.S. sent 54 percent of its waste to more than 1,700 landfills.

Future Progress
Germany certainly has no plans to fall out of the No. 1 position in the recycling race. With its recycling rate already around 70 percent, the nation is ready to conquer the final frontier in sustainability.

By the year 2020, Germany hopes to find a way to reuse every last scrap of every item produced. Achieving this zero waste goal would make the country 100 percent sustainable and eliminate the need for landfills completely.

It’s no question that Germany has some serious work to do in order to meet its goal, but with the excellent ability to organize its industry members and citizens, as well as engineer highly innovative and efficient manufacturing and recycling
processes, the nation continues to prove itself as one of the most forward-thinking and environmentally conscious countries in the world.


**Legislation on the environment and waste in South Africa**

In general, environmental policy, and even more so policy regarding waste has not enjoyed high priority under the apartheid government, and this neglect continued after the ANC was elected into government in 1994. Continuous protests and lobbying by civil society groups were the driving force that pushed the various administrations into taking action, in particular after the formation of Earthlife Africa in 1988. For example, in 1996 the government gave in to demands by civil society to finally establish some coherent policy on how to handle waste in South Africa. As a consequence, it initiated the Consultative National Environmental Policy Process (CONNEPP), designed as the overarching environmental policy framework within which a coherent waste policy could then be developed from scratch and with the involvement of all sectors. For Hallowes and Munnik CONNEPP represented “the high point of post-apartheid participatory policy development”, because it adopted most of the principles that were demanded by civil society. These included sustainable development; environmental justice; the waste hierarchy; and the polluter pays principle. These principles were then incorporated into the National Environmental Management Act (NEMA) of 1998.

After the publication of the National Waste Management Strategy (NWMS) in 2000, the DEAT convened a National Waste Summit in Polokwane in 2001 with representatives of government (national, provincial and local), civil society and the business community to address the challenges facing waste management in South Africa. The summit was held in recognition that waste management should be a priority for all South Africans and that there is an urgent need to reduce, reuse and recycle waste in order to protect the environment. It produced the Polokwane Declaration, a document that was a collaboration of government, business and civil society stakeholders. The Declaration was based on the idea that waste management can contribute to sustainable development and its vision was “[t]o implement a waste management system which contributes to sustainable development and a measurable improvement in the quality of life, by harnessing the energy and commitment of all South Africans for the effective reduction of waste”. Polokwane defined a bold national goal to: “Reduce waste generation and disposal by 50% and 25% respectively by 2012 and develop a plan for ZERO WASTE by 2022.” To achieve this, the declaration laid out a set of actions starting with implementation of the NWMS and the development of legislation, but effectively nothing happened.

**The new Constitution of 1996, NEMA and NEMWA**

The overarching guideline for policy-making (on all levels) is naturally the constitution. South Africa’s new constitution of 1996 is one of the most advanced in the world when it comes to rights (for citizens). In the previous chapter it has been outlined that South Africa’s Constitution has even embraced sustainable development as a guiding principle. Section 24 in the Bill of Rights clearly spells out the rights and duties towards the environment:

> “Everyone has the right –
> (a) to an environment that is not harmful to their health or well-being; and
> (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –
> (i) prevent pollution and ecological degradation;
> (ii) promote conservation; and

47
The National Environmental Management Act (Act no. 107 of 1998) (NEMA) has been the first attempt to transform these principles into coherent national policy. However, the legislation regulating waste management in South Africa was still fragmented. This led to the development of the National Environmental Management: Waste Act (Act No. 59 of 2008) under NEMA. NEMWA finally provided a more holistic approach to waste management regulation.

The Waste Bill, like the Air Quality Act before it, is ‘framework’ legislation. This means that one of the key functions of the Bill is to institute authority for the various institutions in state and provincial governments. It thus defines the authority given to the minister of Environmental affairs and the provincial Members of the Executive Committee (MECs) to make regulations governing a range of aspects of management. This is important, as regulations not only are the technical means of implementing policy but constitute the detail of policy.

“The overall purpose of the Waste Act is to change the law regulating the management of waste in order to protect the health of people as well as the environment (plants, animals, land, air, water etc). […] The State has an obligation required by the Constitution, to protect the environment and prevent ecological degradation and it does that by making different Regulations which everyone must comply to.”

The Waste Act follows the internationally recognised waste management hierarchy which is an descending order of how to deal with waste: (1) the most desirable scenario is the avoidance of waste; (2) where it cannot be avoided it must be reduced, (3) reused, (4) recycled or recovered; and (5) only if there is no other use for it should it be disposed of. Thus, according to this hierarchy, only a small amount of waste should be deposited on landfills. In South Africa, however, most of the generated waste is still disposed. One of the aims of the Waste Act is to systematically improve this situation by for instance promoting recycling.

NEMWA obliged the Minister of Environmental Affairs to establish a national waste management strategy, and allows the Minister to set targets for recycling of certain waste streams and for the minimisation of certain waste streams as well as to ban certain waste streams from being landfilled. As a result, a National Waste Management Strategy (NWMS) was established and approved by Cabinet in 2011. It sets targets to promote waste minimisation, and the reuse, recycling and recovery of waste. All state departments, provinces, municipalities, the private sector and the general public are compelled to adhere to these. The strategy could for instance set quotas for the percentage of waste which must be recycled (over a certain period). In essence this means that (theoretically) the NWMS has the same weight as an Act of Parliament. The implementation of the strategy is supposed to be monitored and the strategy subject to reviewed at least every five years (the NWMS is currently under revision by the DEA). This is not possible without systematic recording of the status quo of waste information in the country to be made available to decision-makers in government and industry.

According to estimates of the recent Baseline Report, South Africa produced about 108 million tons of waste in the year 2011, of which approximately 98 million tons ended up on landfills – more than 90 percent! In turn this means that the recycling rate of all generated waste is a meagre 10 percent. This shows that waste management in South Africa still for the most part is managing the landfilling of waste. Of the 108 million tons 59 million tonnes (55%) is general waste, 48 million tonnes (44%) is currently unclassified waste and the remaining 1 million tonnes (1%) hazardous waste. However, the recycling rate has increased for most materials over the past decade.
Alternative case study: The Renewable Energies Act in Germany


Act revising the legislation on renewable energy sources in the electricity sector

Of 21 July 2004

The Bundestag has adopted the following act:

Section 1
Act on granting priority to renewable energy sources (Renewable Energy Sources Act)

Article 1
Purpose
(1) The purpose of this act is to facilitate a sustainable development of energy supply, particularly for the sake of protecting our climate, nature and the environment, to reduce the costs of energy supply to the national economy, also by incorporating long-term external effects, to protect nature and the environment, to contribute to avoiding conflicts over fossil fuels and to promote the further development of technologies for the generation of electricity from renewable energy sources.
(2) This act is further intended to contribute to the increase in the percentage of renewable energy sources in power supply to at least 12.5 per cent by 2010 and to at least 20 per cent by 2020.

Article 2
Scope of application
(1) This act regulates
1. priority connections to the grid systems for general electricity supply of plants generating

<table>
<thead>
<tr>
<th>General Waste</th>
<th>Generated</th>
<th>Recycled</th>
<th>Landfilled</th>
<th>Recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-recyclable municipal waste</td>
<td>8,062,934</td>
<td>-</td>
<td>8,062,934</td>
<td>0</td>
</tr>
<tr>
<td>Organic waste</td>
<td>3,023,600</td>
<td>1,058,260</td>
<td>1,965,340</td>
<td>35</td>
</tr>
<tr>
<td>Construction &amp; demolition waste</td>
<td>4,725,542</td>
<td>756,087</td>
<td>3,969,455</td>
<td>16</td>
</tr>
<tr>
<td>Paper</td>
<td>1,734,411</td>
<td>968,614</td>
<td>745,797</td>
<td>57</td>
</tr>
<tr>
<td>Plastic</td>
<td>1,308,637</td>
<td>235,555</td>
<td>1,073,082</td>
<td>18</td>
</tr>
<tr>
<td>Glass</td>
<td>959,816</td>
<td>307,141</td>
<td>652,675</td>
<td>32</td>
</tr>
<tr>
<td>Metals</td>
<td>3,121,203</td>
<td>2,496,062</td>
<td>624,241</td>
<td>00</td>
</tr>
<tr>
<td>Tyres</td>
<td>246,631</td>
<td>9,865</td>
<td>236,766</td>
<td>4</td>
</tr>
<tr>
<td>Other (mostly biomass waste from industry)</td>
<td>36,171,127</td>
<td>-</td>
<td>36,171,127</td>
<td>0</td>
</tr>
<tr>
<td>Total general waste</td>
<td>59,263,901</td>
<td>5,852,484</td>
<td>53,501,417</td>
<td>10</td>
</tr>
</tbody>
</table>
electricity from renewable energy sources and from mine gas within the territory of the
Federal Republic of Germany including its exclusive economic zone (territorial application of
this act),
2. the priority purchase and transmission of, and payment for, such electricity by the grid
system operators and
3. the nation-wide equalisation scheme for the quantity of electricity purchased and paid for.

[...]

Article 3
Definitions
(1) Renewable energy sources shall mean hydropower including wave power, tidal power,
salt gradient and flow energy, wind energy, solar radiation, geothermal energy, energy from
biomass including biogas, landfill gas and sewage treatment plant gas as well as the
biodegradable fraction of municipal and industrial waste.
[...]

Article 4
Obligation to purchase and transmit electricity
(1) Grid system operators shall immediately and as a priority connect plants generating
electricity from renewable energy sources or from mine gas to their systems and guarantee
priority purchase and transmission of all electricity from renewable energy sources or from
mine gas supplied by such plants.
[...]

Article 11
Fees paid for electricity produced from solar radiation
(1) The fees paid for electricity generated by plants using solar radiation shall amount to at
least 45.7 cents per kilowatt-hour.
(2) If the plant is attached to or integrated on top of a building or noise protection wall, the
fees shall be
1. at least 57.4 cents per kilowatt-hour up to and including a capacity of 30 kilowatts,
2. at least 54.6 cents per kilowatt-hour for a capacity 30 kilowatts and over, and
3. at least 54.0 cents per kilowatt-hour for a capacity of 100 kilowatts and over.

Section 4
Entry into Force, Expiry
This act shall enter into force on the day following its promulgation. At the same time, the
Renewable Energy Sources Act of 29 March 2000 (BGBl. I p. 305), last amended by the Act of
22 December 2003 (BGBl. I p. 3074), shall expire.

Short facts
According to DENA, by January 2011, around 17% of electricity, 8% of heat and 6% of fuel used
in Germany is generated from renewable sources, further reducing Germany’s energy imports. In
addition, 110 million metric tons of CO2 emissions were cut due to the use of renewable energies
only during 2010. The renewable energy industry employs today more than 350,000 people in Ger-
many (up from 30,000 people in the year 1998) and is home to several world market leaders like
Enercon, Nordex and Repower in the wind industry and Q-Cells, Schott Solar and SolarWorld in
the solar industry. Germany is today among the world’s three major renewable energy economies
(Renewable Energy Network 21, 2011). Due to its success, the German Renewable Energy Act can
serve as an archetype of similar legislation in other countries.
The three main principles 
The three main principles of the EEG are:

a) Investment protection through guaranteed feed-in tariffs and connection requirement: Every kilowatt-hour that is generated from renewable energy facilities receives a fixed feed-in tariff. Furthermore, the network operators must feed in this electricity into the grid preferentially to the electricity generated by conventional sources (nuclear power, coal and gas). Renewable energy plant operators receive a 20 year, technology specific, guaranteed payment for their produced electricity. In particular, small and medium-sized enterprises SMEs have been given new access to the electricity market, along with private land owners. The Federal Ministry for Environment, Nature Conservation and Nuclear Safety (2010) argues that anyone who produces renewable energy can now sell his ‘product’ for a 20-year fixed price.

b) No charge to Germany’s public purse: as of today, the promotion of renewable electricity is still necessary. The EEG rates of remuneration clearly show what electricity from wind, hydro, solar, bio and geothermal energy actually cost. Unlike fossil fuels, there are no external costs such as damages to the environment, the climate or human health. The remuneration rates are not subsidies as such since they are not paid for by taxes. On the contrary, the “polluter pays principle” (OECD, 2006) is distributed to the consumer: who consumes more pays more. The remuneration rates are paid for by every consumer with the electricity bill.

c) Innovation by falling feed-in-tariffs: periodically lowering rates of remuneration for new plants (degression of 1% per year) exerts cost pressure on manufacturers. Thus, technologies are becoming more efficient and less costly.

Effectiveness of the German Renewable Energy Act 
Various studies, including EC's study reveal that because the feed-in tariff provides financial certainty, it is more cost effective and less bureaucratic than other support schemes such as investment or production tax credits, quota based renewable portfolio standards (RPS), and auction mechanisms.(EC, 2005; Morris, 2007; Butler & Neuhoff, 2008)

The economic outcome of the EEG for Germany has been impressive. According to the Green Energy Act Alliance, 2011, the net benefit of the EEG exceeds the additional costs of initial investment - by 3.2 billion Euros. Building a safe and clean power supply incurs costs. However, Krewitt and Nitsch (2001) compared the external costs avoided in the German energy system to the compensation to be paid by grid operators for electricity from renewable energies and found that results clearly indicate that the reduced environmental impacts and related economic benefits outweigh by far the additional costs for the compensation of electricity from renewable energies.

In addition, the feed-in tariff generates more competition, more jobs and more rapid deployment for manufacturing, and does not pick technological winners, such as more mature wind power technology versus solar photovoltaics technology (EC, 2005; Morris, 2007; Butler & Neuhoff, 2008).

“SOUTH AFRICA IS FORTUNATE ENOUGH TO HAVE HUGE RENEWABLE ENERGY RESOURCES AND, WITH THE POLITICAL WILL, COULD BECOME A RENEWABLE ENERGY LEADER IN AFRICA.”

South Africa is making crucial energy decisions at a time when humankind is at a critical crossroads. Since the industrial revolution, the planet has warmed by 0.74°C; a distortion of the climate system caused by human activities such as the burning of carbon-intensive fossil fuels1. The impacts we are witnessing are occurring far sooner than had been predicted. Droughts in many parts of the world, the near-total loss of the Arctic ice-cap and an additional 150,000 deaths per year2 indicate that we are already experiencing dangerous climate change. And it is the world’s poorest and most vulnerable people who will be affected first – that means that the African continent is on the frontline of climate change. The challenge humanity faces now is to avoid “run-
away” climate change. Climate scientists warn that if we warm the atmosphere by more than 2°C from pre-industrial levels, we invite catastrophic climate change and trigger processes that will result in even more emissions being released, taking global warming beyond our control. The warming we have already experienced, plus an additional degree expected due to the “lag” effect of greenhouse gases already in the atmosphere, takes us to the brink. If we pass this threshold, the economic, social, political, cultural and environmental impacts will be catastrophic. South Africa is the largest CO2 emitter on the African continent, and the 12th largest emitter in the world. As such, the country has a moral responsibility to act and implement a coordinated, coherent, efficient and effective response to the global challenge of climate change. In presenting the greatest threat the planet faces, climate change also provides an opportunity for sustainable development. South Africa has massive renewable energy sources, from wind and marine energy to some of the best solar resources in the world. Harnessing these resources would not only make a huge contribution to averting runaway climate change, but would also create a green economy based on green jobs. We can and must create a much more sustainable society, using existing clean technologies. However, time is not on our side and the transition must begin immediately. Action is required both through the international United Nations climate negotiations (aimed at limiting greenhouse gas emissions), but also through concrete and immediate action domestically. There is much South Africa can do to become a climate leader. Currently, South Africa’s greenhouse-gas emissions are still on a sharp upward trajectory, with more than 90% of South Africa’s electricity coming from coal, and two of the biggest coal-fired power stations in the world (Medupi and Kusile) under construction.63

references
1 IPCC FOURTH ASSESSMENT SYNTHESIS REPORT
HTTP://WWW.IPCCC.ORG/REPORT/AR4/SYN_AR4_AR4_SYN.PDF
2 WORLD HEALTH ORGANISATION
HTTP://WWW.WHO.ORG/GLOBALCHANGE/NEW/SFC/JULIANHEALTH/EN/INDEX.HTML

Lecture 11: International environmental treaties and regimes

The paradox of international co-operation: environmental treaties and regimes

International co-operation (e.g. to limit climate change) often proves to be very difficult – but there is cooperation. The developed countries have emitted the bulk of greenhouse gases over the past three centuries (and still do) and therefore contributed most to climate change. The developing countries on the other hand have in the past not contributed much in the warming of the atmosphere, but are struck hardest by the impacts today. The industrialised countries of the North do not want to lower their (economical) status quo, and the global south does not want to abandon all ‘development’ for the good cause, hence the difficult negotiations to limit climate change.

What is particularly interesting in this regard is that the individual rationalities of states and their representatives as well as interest groups are adding up to global irrationality (i.e. for individual states it’s rational not to aim for too ambitious cutbacks of emissions; for planet earth and humankind in general this could end in disaster). This brings some observers to speak of the “Global Tragedy of the Commons”. 64

Despite the individual interests of states, there has been co-operation at the international level. As this cooperation might at first sight run against the interests of the state, Carter speaks of “the paradox of international cooperation” in global environmental politics. Closely linked to the aspect of cooperation is the concept of regimes, defined by Carter as “the principles, norms, rules and decision-making procedures which form the basis of co-operation on a particular issue in international relations.” 65 Environmental Regimes essentially form the basis for the establishment of the FCCC and the COPs.
From the nature of the international system some of the key questions in global environmental poli-
tics arise:

- How can the growth of international environmental cooperation be explained?
- What are the obstacles to inter-national environmental cooperation?
- Are environmental treaties effective?66

The answers to these questions are obviously important to explain the emergence and endurance of
the UN Climate Change Summits, the Kyoto Protocol and other regimes and treaties.
For example, for realists it is hard to explain why international cooperation in environmental issues
increases since they believe that states seek to maximise power to ensure survival in the interna-
tional world, where anarchy and conflict are prevailing and cooperation the exception. One answer
is that cooperation can be rational if other actors cooperate as well and if not only relative, but also
absolute gains can be achieved. This view finds its explicit expression in institutionalism, that coop-
eration in environmental issues is perfectly rational for self-interested states when the benefits of
cooperation will outweigh the costs.67 On the other hand, constructivists emphasise the structure of
cognitive factors, i.e. processes of learning and identity shaping as well as ideas.

The responses of the United Nations to environmental problems

What is really interesting in the respect of sustainability and climate change is the development of UN con-
ferences, programmes and declarations. In 1972 a UN conference in Stockholm debated under the theme of
“Human environment” global environment and developmental needs. The outcome of the conference was the
Stockholm Declaration and action plan which formulated principles for the preservation and enhancement of
the natural environment. The conference stressed that industrialisation causes environmental problems like
habitat degradation, excessive consumption of natural resources and climate change. This concern led to the
formation of the UN Environment Programme (UNEP). Additionally, in the 1980s the UN set up the world
commission on environment and development, better known as the ‘Brundtland Commission’. It produced Our
Common Future, also known as the Brundtland Report, in which sustainable development was first defined
as development which “meets the needs of present generations without compromising the ability of future
generations to meet their own needs.”68 Since then sustainability has become a ‘buzz word’ in political and
environmental discussions and is today used almost inflationary. In 1992, 20 years after Stockholm, the “UN
Conference on Environment and Development” was held in Rio de Janeiro. This conference is better known as
the “Earth Summit” and it produced the Rio Declaration and the Agenda 21. It aimed at the needs of the poor,
but more importantly in the context of ecologism it defined ‘needs’ not only as economic interests, but
also to live in a fully functional, harmonious global system that includes people and ecosystems. The success
of the Earth Summit was that it brought environment and development issues into the public arena. Two bind-
ing conventions on biological diversity and climate change were signed.

In 1992 194 countries adopted the The United Nations Framework Convention on Climate Change
(UNFCCC or FCCC) to create a framework for discussions and negotiations about what can be done to reduce
global warming. It subsequently formulated the goal “[...] to stabilise greenhouse gas concentrations in the
atmosphere at a level that will prevent dangerous human interference with the climate system.”69 The supreme
body of the Convention is the Conference of the Parties (COP), and since the year 1995 there has been a
COP meeting every year (the climate change summits). It was complemented by the Kyoto Protocol of 1997,
which was a first breakthrough in setting targets to reduce the emission of greenhouse gases. The Kyoto Pro-
tocol was adopted in 1997 and entered into force in 2005 and sets binding targets for 37 industrialized coun-
tries and the European Community for reducing greenhouse gas (GHG) emissions.70 On the 10th anniversary
of the Rio conference the “World Summit on Sustainable Development” took place in Johannesburg in
2002.71 Another 10 years later, the “Rio + 20” summit was held in Rio de Janeiro, marking the 20th anniversary
of the original Earth Summit. However, like at the one in Johannesburg, there was little to celebrate for environmentalists as it yet again only produced memoranda of understanding and little concrete results.

To sum up, all these conferences and declarations clearly show the influence of the environmental movement and contain ideas derived from (shallow) ecologism, especially their concerns with the future of the Earth.

Case study: treaties for the protection of the ozone layer
Read the following pages (246-249) of The Politics of the Environment to get an overview of the measures taken to protect the ozone layer since science has identified this problem as threat to humans:
Table 9.2 Ozone protection: key developments

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>Scientists hypothesise that CFCs might cause ozone depletion.</td>
</tr>
<tr>
<td>1977</td>
<td>UNEP Co-ordinating Committee on the Ozone Layer established to assess ozone depletion.</td>
</tr>
<tr>
<td>1982</td>
<td>Twenty-four states begin discussions towards an ozone convention.</td>
</tr>
<tr>
<td>1983</td>
<td>Vienna Convention signed by twenty states and European Community to co-ordinate reporting and monitoring.</td>
</tr>
<tr>
<td>1987</td>
<td>Montreal Protocol signed by twenty-four states and the European Community to regulate consumption and production of CFCs.</td>
</tr>
<tr>
<td>1989</td>
<td>Ozone Trends Panel report confirms link between CFCs and ozone layer.</td>
</tr>
<tr>
<td>1990</td>
<td>EC and USA agree to phase out all production and consumption of CFCs by 2000.</td>
</tr>
<tr>
<td>1992</td>
<td>Interim Multilateral Fund established; USA, then EC, announce CFC production to halt by 2000.</td>
</tr>
<tr>
<td>1995</td>
<td>Montreal Amendment finalises schedule for phasing out of methyl bromide.</td>
</tr>
<tr>
<td>1999</td>
<td>Beijing Amendment agreed immediate phase-out of bromochloromethane.</td>
</tr>
</tbody>
</table>


Ozone protection

The stratospheric ozone layer plays a critical role in protecting life on Earth by absorbing harmful ultraviolet radiation. In 1974 two Americans based on scientific evidence suggested that the concentration of ozone in the atmosphere could be significantly affected by anthropogenic chemicals, notably chlorofluorocarbons (CFCs), used as propellants in aerosols, refrigerants, solvents, foam products, and halons, which are used in fire extinguishers. These synthetic chemicals leak into the atmosphere and rise into the stratosphere where they release chlorine and bromine which destroy ozone. A thinner ozone layer would increase skin cancers and cataracts, harm human and animal immune systems which would weaken resistance to infectious diseases and damage ecosystems. The sheer volume of these chemicals in the stratosphere is indicative of their significance in modern industrialised economies, being safe (i.e. non-inflammable and non-toxic), stable and versatile. Consequently, any attempt to limit their use was sure to encounter strong resistance from economic interests, notably the major chemical corporations that manufactured them, such as Dupont (USA) and ICI (UK).

The first steps towards international action were tentative, as scientific fact-finding, consensus-building and policy development proceeded hand in hand (see Table 9.2). Initially, it was essential to establish the scientific basis of the ozone problem, so in 1975 the UN Environment Programme (UNEP) funded a study by the World Meteorological Society to examine the link between CFCs and ozone depletion. Two years later a UN conference

of experts from thirty-two countries drew up a World Plan of Action on the Ozone Layer to co-ordinate future research, but not until the discovery in 1985 of a 'hole' in the ozone layer above the Antarctic – regular springtime decreases of ozone in excess of 40 per cent between 1977 and 1984 – did a scientific consensus about the existence of ozone depletion begin to emerge. This consensus was completed in 1988 when the Ozone Trends Panel, representing over a hundred leading atmospheric scientists from ten countries, concluded that the ozone layer in the Northern Hemisphere had been reduced by up to 3 per cent between 1969 and 1985; 'ozone layer depletion was no longer a theory, at last it had been substantiated by hard evidence' (Benedick 1991: 110). Crucially, the panel also confirmed that CFCs and other synthetic chemicals were the primary cause of ozone depletion.

Meanwhile, international negotiations had gradually picked up pace. In 1977, the USA, Canada, Norway, Sweden and Finland (collectively known as the Toronto Group) together urged UNEP to consider remedial action; when this was not forthcoming they took unilateral action to ban non-essential aerosol uses of CFCs. The European Community (EC), which accounted for 45 per cent of world CFC production, strongly resisted such action. In the absence of firm scientific evidence, EC member states were subjected to strong industrial lobbying to protect export markets and avoid the costs of developing substitutes. When multilateral negotiations of a framework convention commenced in 1982, the representatives from twenty-four nations were broadly divided between the Toronto Group, which pushed for a comprehensive ban on non-essential uses of CFCs, and the European Community, which would only consider a cap on production. Unable to resolve this fundamental conflict, the resulting 1985 Vienna Convention for the Protection of the Ozone Layer represented little more than an agreement to co-operate on monitoring, research and information exchange, for it imposed no targets or controls to reduce CFC production, although the USA was able to win an important commitment to start negotiations for a binding protocol (Benedick 1991: 45-6). Nevertheless, the Vienna Convention was significant because it was signed without firm scientific evidence that ozone depletion was happening – the first instance of international environmental law based (implicitly) on the precautionary principle.

During the nine months of negotiations leading up to the signing of the Montreal Protocol in September 1987, the European Community and Japan shifted from resistance to any cut in production to acceptance of a compromise proposal to reduce CFC production by 50 per cent of 1986 levels by 1999 and to freeze halon production at 1986 levels by 1992. Several factors contributed to this dramatic change of heart. Opponents were subjected to energetic US diplomatic manoeuvring. The negotiations were handled skillfully by Mustafa Tolba, UNEP's executive director. European states were increasingly split as West Germany, under strong domestic political pressure to make concessions, disagreed with the other major CFC producers, France, Italy and the UK. Most important, though, was the firming up of
scientific evidence following the discovery of the ozone hole, which had a profound impact on national representatives and even influenced industrial interests (Brennan 1994: 140-41). Again, as the Ozone Trends Panel reported proving the link between CFCs and ozone depletion only appeared several months after the Montreal Protocol was signed, it was significant that politicians had signed an agreement in advance of scientific evidence supporting their action (Seaver 1999: 33-4).

Soon after the Ozone Trends Panel report, DuPont declared that it would accelerate research to substitute and stop manufacturing all CFCs and halons by the end of the century - a declaration swiftly followed by other major international chemical producers (Benedick 1991: 117-18). This scientific evidence led to further strengthening of the regime at follow-up meetings of the signatories, both by ratcheting forward reduction and phase-out dates so that production of CFCs, halons and three other chemicals had halted in developed countries by 1996, and by extending the Protocol to further chemicals, such as hydrochlorofluorocarbons (HCFCs) and bromochloromethane.

One major problem unresolved at Montreal was the need to persuade developing countries to participate in the regime. Industrialised nations, representing 25 percent of the world’s population, were responsible for almost 90 percent of global CFC consumption, with a per capita consumption more than twenty times higher than in less industrialised nations (Benedick 1991: 148-149), so it was obviously incumbent on the former to take the initiative in reducing emissions. However, the long-term success of the regime was jeopardised by the involvement of developing countries, notably China and India, where the consumption of ozone-depleting substances in refrigeration and air-conditioning systems would grow with further industrialisation. Developing countries complained that they should not be expected to incur the costs for solving a problem that they did not cause, and insisted that either they be allowed to continue using CFCs or that they receive financial and technological help to develop substitutes. The Montreal Protocol contained no such facility, so only a handful of developing states signed it; the three largest countries - Brazil, China and India - refused to do so (Porter et al. 2000: 99). Industrialised countries were reluctant to make open-ended commitments to pay for a fund, with the USA particularly concerned about the possible precedent for future environmental regimes notably climate change. It was increasingly apparent that the success of the Protocol depended on providing sufficient incentives to persuade developing countries to sign up. Consequently, the London meeting in 1990 established a multilateral fund for financial and technology transfer to help developing countries. The fund was $160 million, rising to $240 million if China and India signed (which they eventually did), to be administered by UNEP, UNDP and the World Bank. The allocation was subsequently increased and the multilateral fund had dispensed $1.66 billion by the end of 2005 (UNEP 2005: 8).

By November 2005 the Montreal Protocol and London Amendments had 189 and 179 ratifications respectively (ibid. 3).

Climate change

The major climate change issue concerns the ‘greenhouse effect’, a natural phenomenon whereby various atmospheric gases keep the Earth’s temperature high enough to sustain life as we know it. These gases, which include carbon dioxide (CO2), methane, nitrous oxide and halocarbons, allow radiation from the Sun to pass through but then absorb radiation reflected back from the Earth’s surface, trapping heat in the atmosphere. Without the natural greenhouse effect it is estimated that the average global temperature would be about 23 degrees centigrade lower. However, it seems that human activities, notably carbon emissions from burning fossil fuels and deforestation, and methane emissions from agricultural activities such as livestock and paddy fields, have strengthened the greenhouse effect by increasing the concentration of these gases in the atmosphere. It is the fear that a human-made process of global warming is taking place with a range of potentially devastating implications for the planet that makes climate change the most important contemporary global environmental issue.

Scientific research has focused on three key questions: Is there evidence of global warming? If so, is it caused by human activities or is it a natural cyclical fluctuation in temperature? What is the likely impact of global warming? There have been huge advances in the science of climate change in recent years, co-ordinated by the work of the Intergovernmental Panel on Climate Change (IPCC), but the direct relationship between rising temperatures, emission levels, higher concentrations of gases and, crucially, their combined impact remains uncertain. Nevertheless, there is now a broad consensus on the answers to the three questions. Climatological evidence shows that the Earth is getting warmer; global mean surface temperature rose by about 0.6 degrees centigrade over the last century, and is projected to increase by between 1.4 and 5.8 degrees (relative to 1990) by 2100 (IPCC 2001; see also Dessier and Parson 2005: ch. 3). Concentrations of the key gases in the atmosphere have increased substantially during the twentieth century. Most scientists now agree that these gases have contributed to temperature increases and that human activities have produced these higher concentrations. If temperatures continue to rise at a similar rate, the impact of global warming could be devastating. A rise in global average sea level of between 9 and 88 centimetres by 2100 (IPCC 2001) will flood many low-lying lands, while the disruption of global weather systems will alter patterns of land use, reduce agricultural yields, increase water stress and create millions of environmental refugees. Although it remains in the world of informed speculation precisely which countries and regions will suffer most, how soon and by how much, it is certain that less developed countries will suffer the worst
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>First World Climate Conference agreed that human activities had increased levels of CO₂ and that more CO₂ may contribute to global warming, which could have damaging consequences.</td>
</tr>
<tr>
<td>1985</td>
<td>Villach Conference - scientific consensus that increased CO₂ was linked to global warming.</td>
</tr>
<tr>
<td>1990</td>
<td>Preliminary IPCC report and Second World Climate Conference scientific consensus and called for policy response.</td>
</tr>
<tr>
<td>1992</td>
<td>Framework Convention on Climate Change signed by over 150 nations at Rio Summit.</td>
</tr>
<tr>
<td>1995</td>
<td>Berlin Mandate (COP-1) - agreed timetable to negotiate stronger commitments.</td>
</tr>
<tr>
<td>1998</td>
<td>Kyoto Protocol (COP-3) - agreed legally binding targets and timetables for developed countries.</td>
</tr>
<tr>
<td>2000</td>
<td>Collapse of COP-6 talks at The Hague, primarily due to intransigence of a small group of industrialized nations led by USA. Key disagreement over how to treat carbon sinks for the purpose of measuring carbon emissions.</td>
</tr>
<tr>
<td>2001</td>
<td>IPCC Third Assessment report presented new and stronger evidence that most of the observed warming of the last 50 years is attributable to human activities. Binding agreement at Bonn on implementing Kyoto targets - excluding USA. Confirmed in Marrakech Accords (COP-7).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Russia finally ratifies Kyoto Protocol.</td>
</tr>
<tr>
<td>2005</td>
<td>Kyoto Protocol came into force. COP-11 at Montreal agreed to fund Clean Development Mechanism, launched Joint Implementation and established a compliance regime. Initial post-Kyoto dialogue.</td>
</tr>
</tbody>
</table>

See IPCC (http://www.ipcc.ch), IISD (http://www.iisd.ca/process/climate.atm.htm) and the UN (http://unfccc.int/2802.php) for developments in climate change negotiations.

The scientific consensus emerged slowly during the 1980s and 1990s (see Table 9.3). The World Climate Programme conference at Villach, Austria, in 1985 produced the confident scientific conclusion that increased carbon dioxide concentrations would lead to a significant rise in mean surface temperatures (Paterson 1996: 29). Over the next five years this scientific consensus rapidly strengthened as the quality of the data and the climate models improved. The scientific community also started to reach out to the wider political world. The 1988 Toronto Conference, attended by leading scientists and policymakers from many countries, recommended a 20 per cent reduction in CO₂ emissions by 2005 (Paterson 1996: 34). Toronto prompted a host of follow-up intergovernmental conferences and encouraged some countries, including the European Community and European Free Trade Association members, to make unilateral commitments to stabilise carbon emissions. A key role was played by the IPCC, formed by UNDP and the World Meteorological Organisation in 1988; its first report confirmed the scientific consensus that human activities were contributing to climate change, and called for immediate policy action to reduce carbon emissions (Houghton et al. 1990).

The combination of growing scientific consensus, intergovernmental conferences and unilateral commitments generated a political momentum that resulted in the International Convention on Climate Change agreed at the 1992 Rio Earth Summit.

The Framework Convention was initially signed by 155 countries and the EU, and entered into force in March 1994. It identified a set of principles - precaution, equity, co-operation, and sustainability - and a wide range of measures to enable the international community to stabilise greenhouse gas concentrations at levels that should mitigate climate change. However, no firm targets or deadlines were agreed; developed countries were simply given the 'voluntary goal' of returning greenhouse gas emissions to 1990 levels by 2000 (Elliott 2004: 85). The principle of 'common but differentiated responsibilities' was written into the convention, so developed countries were expected to take the lead in combating climate change and to transfer financial and technological resources to developing countries to help them address the problem, but no one was committed to anything specific, apart from establishing a fund under the auspices of the newly formed Global Environment Facility (see Box 9.3).

Nevertheless, an elaborate institutional framework was established to continue negotiations aimed at strengthening what everyone acknowledged was just the first step towards an effective climate change regime. The first Conference of the Parties to the Framework Convention (COP-1) in Berlin in 1995 was unable to agree any new commitments, although the 'Berlin mandate' recognised the need to work towards a protocol that set targets and strengthened commitments to reduce greenhouse emissions. Eventually, the Kyoto Protocol, hammered out over ten days of intense negotiations in December 1997 (COP-3), agreed legally binding targets for developed countries (so-called Annex 1 countries) intended to achieve an overall reduction in GHG emissions of 5.2 per cent of 1990 levels in the period 2008 to 2012 (see Box 9.4).

Each stage of the regime strengthening process in Rio, Berlin and Kyoto was greeted with both acclamation and criticism. Praise for the environmental diplomacy that brokered each agreement in the face of apparently irreconcilable political conflicts was matched by criticism about the weakness of the commitments and sanctions in the treaty. These contrasting responses reflected the compromises that had to be made if agreement was to be reached between sharply opposing negotiating positions. However, subsequent efforts to firm up the details agreed at Kyoto (embodied at The
9.3 The Global Environment Facility (GEF)

The GEF was established in 1991 as a joint programme between the UNDP, the UNEP and the World Bank. The GEF provides funding to help less developed countries implement measures to protect the global environment. The GEF has six priority areas:

- biological diversity
- climate change
- international waters
- ozone layer
- land degradation
- persistent organic pollutants (POPs)

Projects financed by GEF include alternative energy programmes, conservation measures and grass roots/community NGOs.

There was some distrust of the GEF because it was located in the World Bank, which is treated with enormous suspicion by developing nations as it is dominated by industrialised countries. It acts as a standard-bearer of neo-liberal ideologies and has been historically insensitive to environmental concerns. The GEF has been criticised for the lack of transparency in decision-making, the absence of participation by NGOs and local communities, and its pursuit of a Northern agenda (e.g. a small GEF-funded biodiversity project in the Congo provided a green veneer for a much larger World Bank loan for road building and industrial logging).

However, the South has won some important concessions in the way GEF operates, including some reform of GEF decision-making structures, and it is now regarded as one of the most transparent international organisations (Elliott 2004: 101-2). The GEF has dispensed around $4.5 billion in grants and generated $14.5 billion in co-financing schemes that have funded some 3,300 projects in 146 countries. It was pledged a budget for 2002-06 of $3 billion. Although this budget is small in global terms, the GEF does represent an important step in addressing the issue of intra-generational equity.

See GEF (http://www.gefweb.org/) and UNEP (http://www.unep.org/gef/)

9.4 The Kyoto Protocol

The 1997 Kyoto Protocol strengthens the UN Framework Convention on Climate Change agreed at Rio in 1992 by committing developed countries (Annex I) to reducing their collective emissions of six key greenhouse gases (GHGs) by at least 5 per cent below 1990 levels throughout the 2008-12 period (which, in effect, means 10 per cent below 2000 levels and 30 per cent below what would be expected in 2010 without emission control measures).

Individual targets

GHG emissions to decrease by:

<table>
<thead>
<tr>
<th>%</th>
<th>EU, Switzerland, most central/northern European states</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>USA</td>
</tr>
<tr>
<td>2%</td>
<td>Canada, Hungary, Japan, Poland</td>
</tr>
<tr>
<td>3%</td>
<td>Russia, New Zealand, Ukraine</td>
</tr>
<tr>
<td>4%</td>
<td>GHG emissions to increase by:</td>
</tr>
<tr>
<td>1%</td>
<td>Norway</td>
</tr>
<tr>
<td>2%</td>
<td>Australia</td>
</tr>
<tr>
<td>3%</td>
<td>Iceland</td>
</tr>
</tbody>
</table>

The EU 'bubble' of 8 per cent contains wide variations between member states: some richer states have to make large reductions, e.g. Denmark (21 per cent), Germany (21 per cent), UK (12.5 per cent); others merely need to stabilise emissions, e.g. France and Finland; while less developed members can increase emissions, e.g. Portugal (27 per cent), Greece (25 per cent), Spain (15 per cent) and Ireland (13 per cent).

This Protocol also agreed three new flexibility mechanisms to reduce the costs of reducing emissions:

- An international emissions trading regime allowing industrialised countries to buy and sell emission credits amongst themselves.
- A Joint Implementation procedure enabling industrialised countries to implement projects that reduce emissions or remove carbon in another Annex I country in exchange for emission reduction credits.
- A 'clean development mechanism', permitting developed countries to finance emission reduction projects in developing countries and receive credit for doing so.

Although the USA subsequently rejected the Protocol, 178 countries managed to reach a binding agreement for its implementation and the Kyoto Protocol eventually came into force on 16 February 2005.

See http://www.unfccc.de/
insistence of the US government that it be allowed to offset its emissions against its carbon sinks (i.e., its vast forests). Disagreements between developed countries can be attributed primarily to differences in energy resources and the structure of the energy industry (Paterson 1998). Countries that rely on fossil fuels for export income, such as Middle Eastern oil-producing states and those with large energy resources, including the USA, have been most resistant to cuts.

The USA has an abundance of fossil fuel energy: it is the world's second-largest oil and natural gas producer, and the largest coal producer. America has developed a 'gas-guzzler' culture of cheap, available energy, which pen-
curates strong resistance to improving energy efficiency. The economic and political costs of implementing emission cuts are therefore seen as higher in the USA than elsewhere and because climate change is not perceived to be as serious a problem in America as it is across the Atlantic, the US government believes the costs of adapting to climate change are affordable. Furthermore, American politicians have been subjected to strong pressure from a powerful domestic industrial lobby, particularly motor and energy interests (which bankrolled Bush's presidential campaign), to obstruct the regime-building process (Newell and Paterson 1998). Consequently, the Bush administration has played the role of veto state with some aplomb, doing its
t best to reframe the climate change debate on its terms (Schreurs 2004: 219-22). For example, in the face of growing scientific consensus about climate change, the US government has exploited remaining uncertainties, such as the heavy dependence on scientific modelling, although it subsequently shifted ground by conceding that whilst human activities had contributed to climate change it was too late to do anything about it, and that Kyoto
was certainly doomed to fail (ibid.: 221-2). Support for emissions cuts was also inconsistent with Bush's domestic agenda of hijacking the California energy crisis to justify the exploitation of oil reserves in Alaska on the grounds that there was a huge demand for more energy (Liesewski 2002). By con-
trast, most European governments regard climate change as a much greater threat. EU countries are heavily dependent on imported energy and there is no gas-guzzling culture as in the USA, while governments have a stronger balance of payments incentive to cut carbon emissions because of the knock-
on effect of reducing imports of fossil fuels. There is a stronger tradition in Europe of government intervention in economic decision-making, so gov-
ernments are expected to take a lead in dealing with climate change and there is general approval of the proactive role played by the EU in climate change diplomacy.

However, there is evidence of growing opposition in the USA to the President's intransigent position. Several states have developed their own climate change strategy: California has passed laws requiring vehicles to cut carbon emissions and all major industrial producers to cut emissions by 25 percent by 2020 in order to reduce greenhouse gas emissions to 1990 levels by 2020. Some of the states have been increasing their efforts to reduce greenhouse gas emissions. The

Financial Times, 18 October 2006). Some northern states are attempting to regulate regional greenhouse gas emissions, by limiting emissions from power stations (Schreurs 2004: 223). There are signs that the flooding of New Orleans in 2005, which many have (rightly or wrongly) linked to climate change, has led to a shift in domestic public opinion. Indeed, this may be evident in President Bush's changing rhetoric on climate change, as
illustrated by his trumpeting of the Asia-Pacific Partnership on Clean Develop-
ment and Climate, a 2005 initiative with Australia, China, India, Japan and
South Korea, which is intended to find voluntary ways of reducing emissions by accelerating 'the development and deployment of clean energy technolo-
gies' (http://www.apacpartnership.org/default.htm). Not surprisingly,
critics, such as Greenpeace, see it as a way of trying to circumvent the
Kyoto Protocol.

A second fundamental tension dogging negotiations has been the North-
South divide. Although the principle of 'common but differentiated responsi-
ibilities' was enshrined in the Convention, there has been bitter disagree-
ment over what this means in practice (see below). For example, by imposing
limits only on Annex I countries, the US government has been able to crit-
icalike the Kyoto Protocol for effectively absorbing developing nations from
taking action to reduce carbon emissions. Conversely, the major developing
countries, such as China and India, have ensured that the issues of develop-
ment, sovereignty and equity have had a prominent place on the agenda.
Many disputes boil down to conflict over the transfer of financial and technolog-
al resources from North to South. There has been little disagreement
with the principle that developed countries should transfer resources to
help developing countries invest in energy-efficient technology, but putting
it into practice has thrown up many knotty problems. Developed countries
have been unwilling to put their hands in their pockets, and big private
corporations are reluctant to relinquish control of technologies without eco-

nomic or financial compensation (e.g., access to markets); hence the paucity
of firm obligations in the Framework Convention and the Kyoto Protocol. It
is important to note that the simple North–South dichotomy does not capture
the complexity of climate change politics: just as there are divisions
between developed nations over what should be done, there are also oppos-
ing interests among developing countries. For example, the Alliance of Small
Island States (whose members are particularly vulnerable to rising sea levels
caused by climate change) has lobbied for firm targets and commitments,
whereas oil-producing states have opposed them.

Underlying both these key tensions is the familiar trade-off between eco-
nomic and environmental interests. Short-term concerns about economic
growth and development have outweighed the longer-term need to mitigate
climate change. With little visible immediate evidence of global warming
that might whip up public concern, it is all too easy for governments to
bow to producer and consumer resistance to costly remedial measures such
as carbon taxes. Certainly, international efforts to mitigate climate change have been far less successful than action on ozone depletion.

**Critical question 1**
Why has it been easier to obtain international co-operation to prevent ozone depletion than climate change?

**Accounting for regimes**

This section identifies the key factors determining the success of environmental regime bargaining, drawing in particular on the ozone and climate change treaties.

Regime formation is aided by the willingness of a powerful nation, or group of nations, to take a leadership role by cajoling or bullying weaker states into supporting a treaty. A lead state will be committed to achieving effective international action on an issue; it will accelerate the bargaining process and seek the support of other states for a regime (Porter et al. 2000: 36). The USA, the most powerful country in the world, is the obvious candidate to play a hegemonic role in a way similar to its imposition of the Bretton Woods system of trade liberalisation and stable currencies on the international community in the aftermath of the Second World War (Gilpin 1987). However, although the USA played a leading role in ozone diplomacy, its record in the Antarctic, acid rain, biodiversity and climate change treaty negotiations shows that it has more often obstructed international cooperation. Consequently, it has fallen to other economically powerful states to take a lead role. Australia and France were instrumental in pushing for the 1991 Madrid Protocol banning mineral extraction in the Antarctic (Elliott 1994). On acid rain, Sweden and Norway were lead states in bringing about the Geneva Convention on Long Range Transboundary Air Pollution (LRTAP) in 1979, while Germany later took the lead in reaching agreement on the Helsinki Protocol (Ley 1993). During the Vienna Convention ozone negotiations, Finland and Sweden submitted the initial draft agreement before the USA adopted a lead role in proposing the 95 per cent reduction in CFCs. Groups of states can also make a significant contribution, as illustrated by the Toronto Group in ozone diplomacy, and the EU in pushing for firm emission reduction commitments at the Kyoto Summit. Indeed, the EU, representing a rich and powerful bloc of industrialised nations, is an increasingly important player in environmental diplomacy (see Chapter 10).

Conversely, a veto state will impede negotiations or stall implementation of an agreement. Veto states are most significant where the involvement of a particular country, or group of countries, is essential for the negotiation of an effective regime. Thus, knowing that any climate change agreement would be ineffective without its involvement, the US government was able to make important concessions at Kyoto, as did the Russian government prior to its ratification of the Protocol. The LRTAP regime was initially weakened without support from Britain, the major source of acid precipitation in Northern Europe. A ban on the ivory trade is meaningless without the support of Japan as the largest market for ivory. Key veto states are usually OECD countries, but the largest developing states, notably China and India, have played an assertive role in extracting important concessions, as in the ozone negotiations. Lead states need to persuade veto states of the error of their ways, a task that will usually involve offering them some form of compromise or incentive to drop their opposition, such as the payments to China and India that persuaded them to sign the London Amendments on ozone depletion, or accepting the American proposal at Kyoto to set up a tradable permit scheme.

The resistance of veto states is usually motivated by a desire to protect vital economic interests. European states initially resisted attempts to freeze CFC production because their chemical industries had not yet developed substitutes. Japan, Iceland and Norway have championed their coastal communities by resisting bans on commercial whaling (Schoett 1997). British opposition to an acid rain agreement reflected a wish to protect its energy industries from the enormous costs of compliance (Boehmer-Christiansen and Skea 1991). In each case, governments have been subjected to strong lobbying from powerful domestic economic interests opposing the regime.

One of the most effective lobby groups was the Global Climate Coalition, which was instrumental in President Bush's refusal to sign the Climate Convention at Rio in 1992 and later in persuading the Clinton presidency to take a tough negotiating stance at Berlin and Kyoto. It should be noted that economic interests do not always oppose international environmental cooperation. The insurance industry, for example, is relatively sympathetic towards action on climate change because damage to property from rising sea levels and the disruption of weather patterns is likely to generate massive insurance claims (Breger et al. 2001; Jagers et al. 2005). Moreover, where it is clear that a changing political climate makes environmental regulations inevitable, then government and industry may unite to win the deal that best suits their national self-interest. The US government was encouraged to pursue its lead role in ozone diplomacy after 1988 by the American chemical conglomerate DuPont, which hoped to snatch a competitive advantage over rival European chemical manufacturers in the development of CFC alternatives (Benedick 1991: 30–4). Nevertheless, on balance, economic interests tend to push governments towards a veto rather than a lead role.

Conversely, domestic political pressure from environmental groups, the media or public opinion may persuade a government to become a lead state. When the West German government swung from veto to lead state on acid rain in the early 1980s, it was influenced by the rising importance of environmental issues and the emergence of the Green Party as an electoral
Endnotes:


2 Sources used for the paragraphs on the Industrial Revolution:
   - Academic Kids Encyclopedia: the Scientific Revolution; the Digital Revolution
   - Britannica Online Encyclopedia: the Neolithic Revolution; the Scientific Revolution


4 UN-HABITAT, State of the World’s Cities 2012/2013, p. 28


6 UN-HABITAT, State of the World’s Cities 2012/2013, p. 28


9 UN-HABITAT, State of the World’s Cities 2012/2013, p. 78

10 Martin Medina, ‘Waste picker cooperatives in developing countries’, p. 2

11 UN-HABITAT, State of the World’s Cities 2012/2013, p. 78

12 Ibid.

13 Ibid., p. 250


15 Ibid. p. 19

16 Ibid. p. 29


22 Ibid., p. 266f.


24 cf. Dobson, Green Political Thought

25 Heywood, Political Ideologies, p. 271

26 Ibid., p. 267

27 Ibid., p. 268

28 Ibid.

29 Ibid., p. 269

30 Ibid., p. 271

31 Ibid., p. 275

32 Ibid., p. 276

33 Ibid., p. 277

34 Ibid., p. 279


36 Ibid., p. 282

37 Ibid.

38 The richest national environmental organisations in the USA have been called the ‘Big Ten’ or the ‘Dirty Dozen’; see Doyle and McEachern, Environment and Politics (London and New York: Routledge, 1999), p. 93


40 Doyle and McEachern, Environment and Politics (London and New York: Routledge, 1999), p. 66


42 Ibid., p. 112

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Hallowes and Munnik, *Wasting the Nation*, p. 33


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Constitution of the Republic of South Africa of 1996


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DEA, Baseline Report, p. 1

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