

A Green History of the World

**Excerpted from the book by:
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and other sources**



The Foundations of History

All human societies have been, and still are, dependent on complex, interrelated physical, chemical and biological processes. These include:

- **Energy produced by the sun**
- **Circulation of the elements crucial for life**
- **Geo-physical processes that have caused the continental land masses to migrate across the face of the globe**
- **Factors regulating climatic change**



The Foundations of History

In their relationship to the ecosystem, two factors distinguish humans from all other animals.

- 1. We are the only species capable of endangering and even destroying the ecosystems on which we depend for our existence.**
- 2. We are the only species to have spread into every terrestrial ecosystem and then, through the use of technology, to have dominated them.**



The First Great Transition

For about 2 million years humans lived by gathering, herding and hunting.

In the space of a few thousand years a radically different way of life emerged based on a major alteration to natural ecosystems in order to produce crops and provide pasture for animals.

It was capable of providing much greater quantities of food which made possible the evolution of settled, complex, hierarchical societies and a much faster growth in human population.



Destruction and Survival

Agriculture involves clearing the natural ecosystem in order to create an artificial habitat where humans can grow the plants and stock the animals they want.

The natural balances and inherent stability of the original ecosystem are thereby destroyed. Instead of a variety of plants and permanent natural ground cover a small number of crops make only part-time use of the space available.



Ways of Thought

Human actions have shaped the environment in which successive generations and different societies have lived.

Driving force is simple – the need as human numbers have increased to feed, clothe and house them.

But, the way in which human beings have thought about the world has been important in *legitimizing* their treatment of it.



Ways of Thought

What is the relation of humans to the rest of nature?

Are humans an integral part of nature?

The answer to this question is crucial in determining how different thinkers and religions decide which human actions can be regarded as *legitimate* or *morally* justified.



Ways of Thought

The origins of European thought (which is where most of ours originates can be traced back to where?

Greece & Rome: the ideas the early Christian church inherited from its Jewish origins.



Ways of Thought

The strong conviction running through both classical and Christian tradition has been that human beings have been put in a position of dominance over the rest of a subordinate nature.

The idea that humans have a responsibility to preserve a natural world of which they are merely guardians can be traced through a succession of thinkers, but it remains a minority tradition.

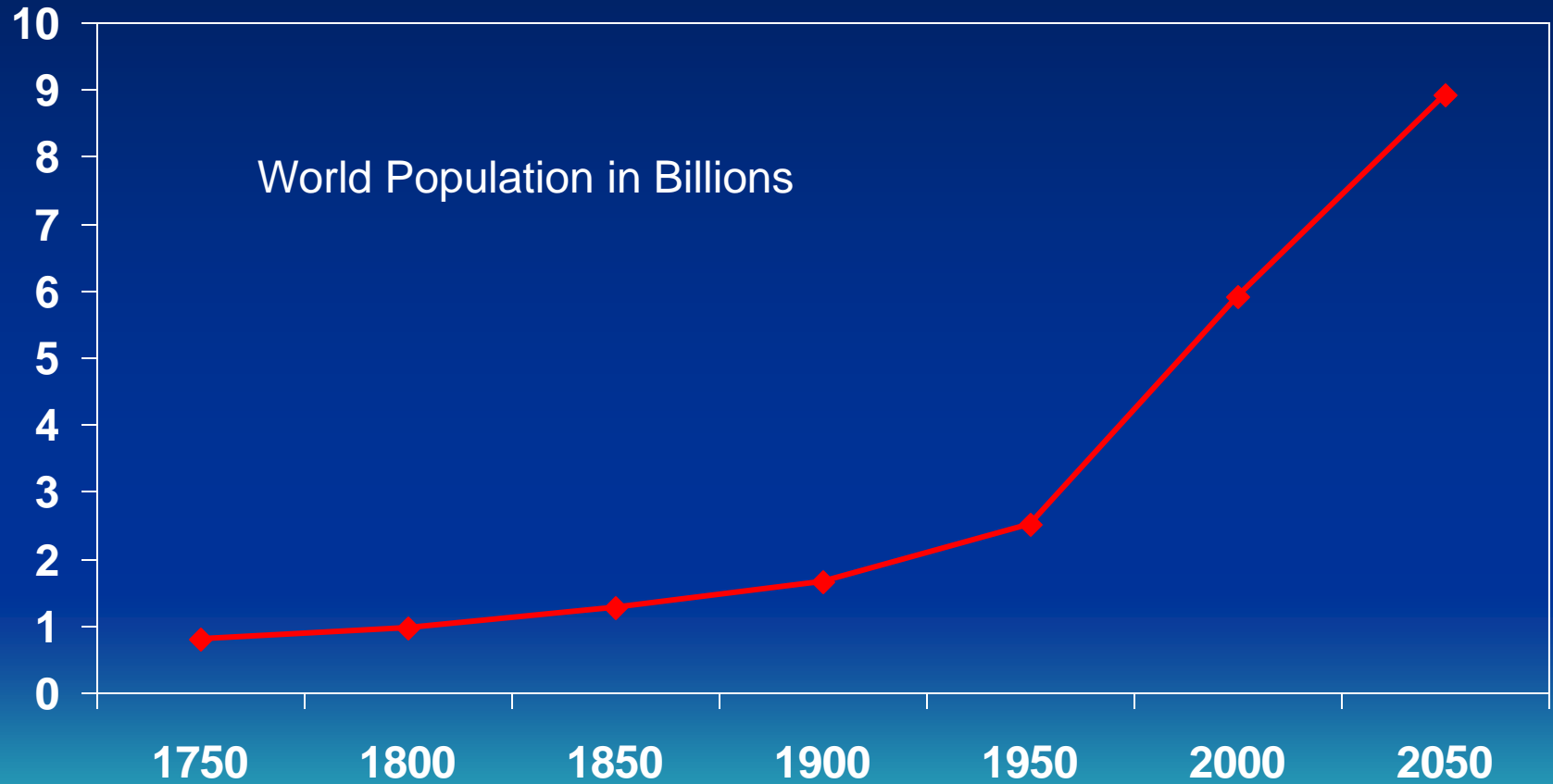


The Weight of Numbers

One of the greatest changes in human history has been the unprecedented, rapid increase in population, partly caused by the fall in the number of deaths from infectious diseases during the course of the last two centuries.



The Weight of Numbers



The Weight of Numbers

Year	Population	Years Between
1804	1 billion	-
1927	2 billion	123
1960	3 billion	33
1974	4 billion	14
1987	5 billion	13
1999	6 billion	12
2013	7 billion	14
2028	8 billion	15
2054	9 billion	26

The Weight of Numbers

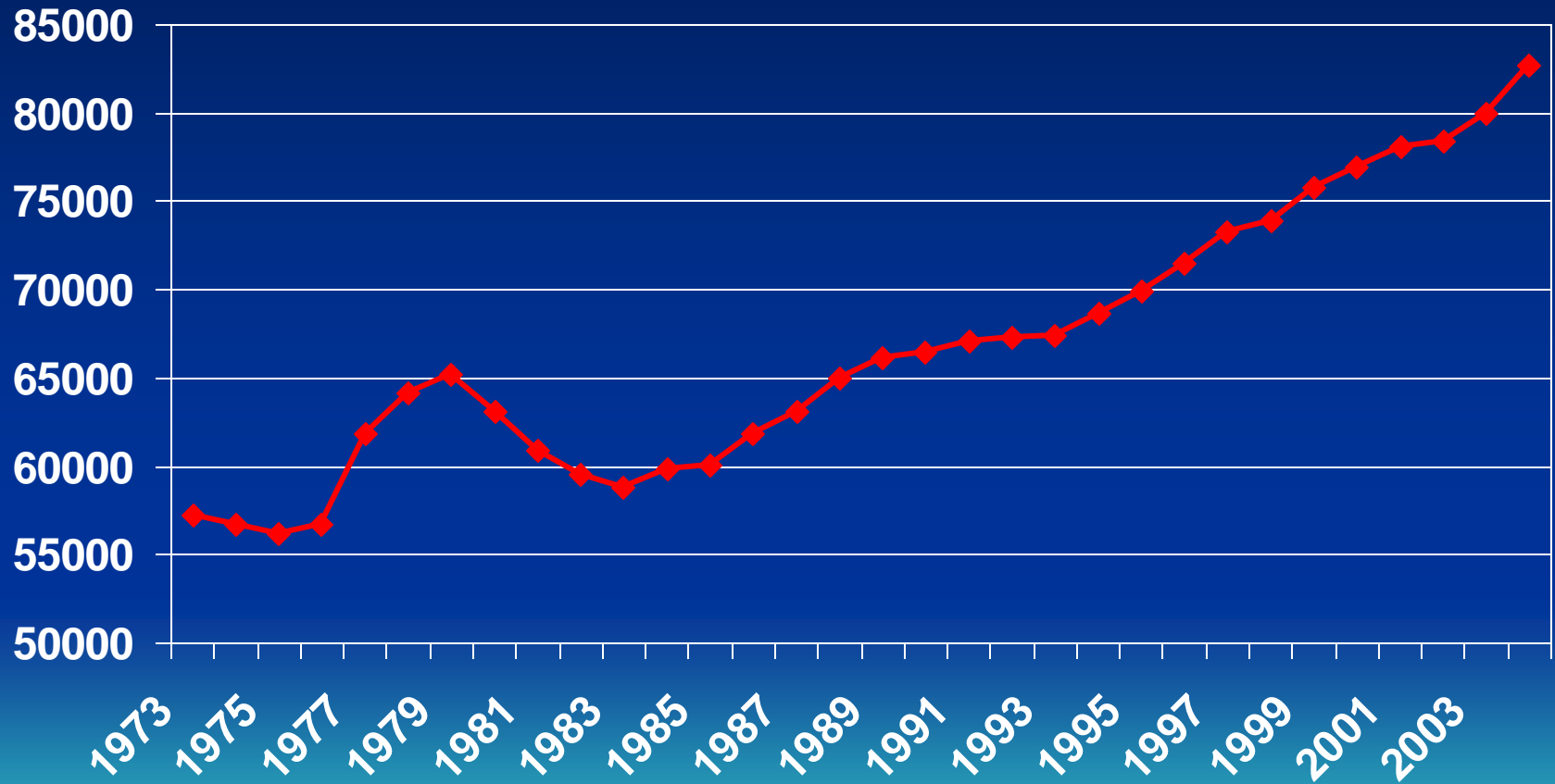
The period after 1850 witnessed two major revolutions:

- The mechanization of agriculture
- The adoption of high input farming



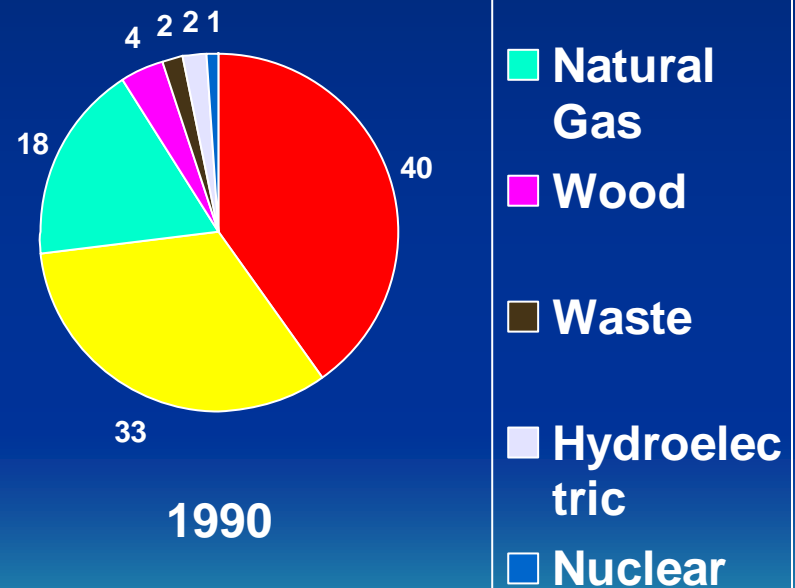
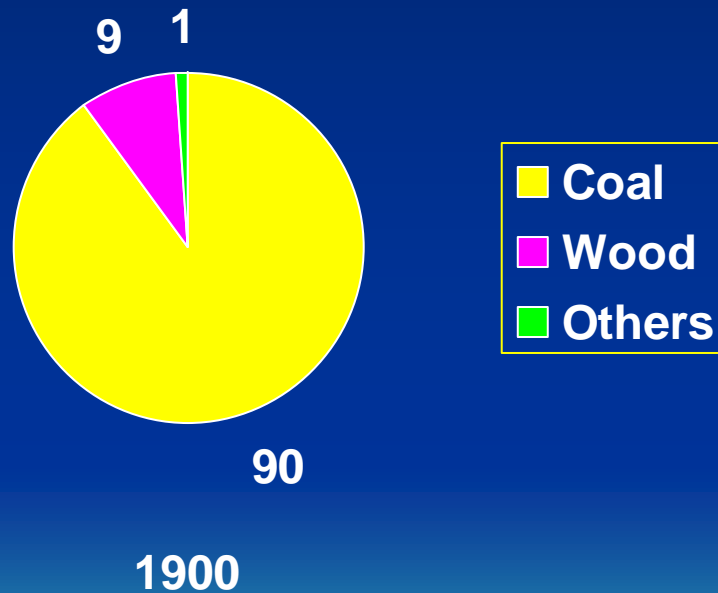
The Weight of Numbers

World petroleum consumption
Thousand barrels per day

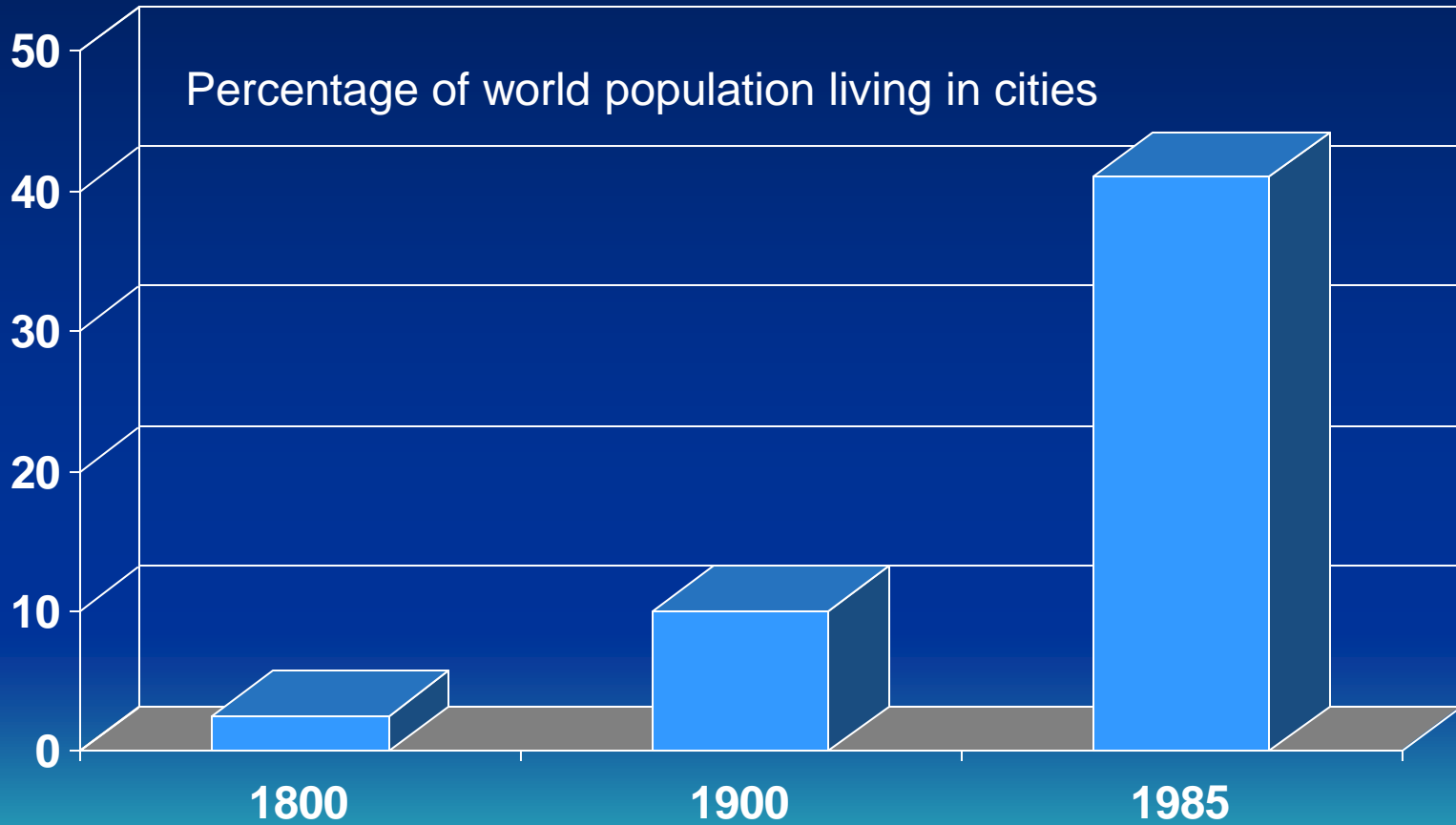


The Weight of Numbers

Percentage share of world energy consumption



The Rise of the City



















Creating the Affluent Society

- But, this has come at a significant price – a vast increase in the consumption of the world's limited energy resources and raw materials, widespread pollution from the industrial processes involved and a variety of social problems.
- It also has raised major questions of equity about the distribution of wealth within individual countries and about the comparative standards of living in the industrialized world and the Third World.



Polluting the World

- Pollution has a long history.
- The creation of wastes has been one of the distinguishing characteristics of every human society.
- One of the most basic problems for every society has been to dispose of human waste and at the same time secure a supply of drinking water that is not contaminated with these wastes.



Polluting the World

There are two closely related problems of water supply – the need to safeguard

- Quantity
- Quality



The Shadow of the Past

- The foundations of human history lie in the way in which ecosystems operate.
- All living things on earth, including humans, form part of these complex webs of interdependence between the different plants and animals constituting a food chain stretching from the photosynthesizers at the bottom through the herbivores to the carnivores at the top.



The Shadow of the Past

- The process of moving from a pre-industrial society to an industrialized one had been called:

development

- It is inevitable if more people are to be supported and the seemingly insatiable desire for higher material standards is to be met.



The Shadow of the Past

CONSEQUENCES

- Instead of seeing the environment as the foundation of human history, settled societies, especially modern industrial societies, have acted under the illusion that they are somehow independent from the natural world, which they have generally preferred to see as something apart which they can exploit more or less with impunity.



The Shadow of the Past

- Humans have put increasing pressure on the earth's environment – in defiance of basic ecological principles.



The Shadow of the Past

The Bottom Line

In this wider perspective it is clearly far too soon to judge whether modern industrialized societies, with their very high rates of energy and resource consumption and high pollution levels, and the rapidly rising human population in the rest of the world are ecologically sustainable.

We have a difficult set of problems to solve!

