



## CIO Special

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# ESG yesterday, today, tomorrow – sustainability across the centuries

## 01 The growing cost of inaction

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## 03 ESG during enlightenment and industrialisation

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### Key takeaways

- There is growing evidence that climate change will have serious consequences on the natural world, society and the global economy.
- Yet the idea of sustainable living in harmony with nature arguably dates back to prehistoric times and has been promoted for centuries.
- The agrarian and industrial revolutions created huge benefits for humanity but also the present threat of environmental collapse.
- With Environmental, Social and Governance (ESG) investing, the power of finance can be channelled to support the broader objectives of society.

Around the world, a popular movement is growing in response to threatening scenarios about our future. We are being called upon to act by a diverse range of organizations, from the Intergovernmental Panel on Climate Change (IPCC) to 'Fridays For Future', the international youth protest group. We are also hearing the term Environmental, Social and Governance Investing or 'ESG Investing' – and other related terms – with increasing frequency in the mainstream media. It is time to ask ourselves: what is happening here, and why now?

### 01 The growing cost of inaction

Let's take a look at a few facts and figures. A new study by researchers at the Swiss University ETH Zurich suggests that, with a moderate average global warming of 1.4 degrees Celsius, European cities will become warmer by 3.5 degrees in summer and by 4.7 degrees in winter by 2050<sup>1</sup>. The climate in London will be similar to that of Barcelona today, and the average temperature in Madrid will rise to the present-day level in Marrakesh. To put this another way: the prevailing climate is currently moving away from the equator at a rate of about 20 kilometres a year. Of 250 cities analysed worldwide, 22% are set to be confronted with a climate that, at present, does not exist in any city on Earth.

Meanwhile, the world's tropical rainforests are under serious threat. According to the Organization for Economic Cooperation and Development (OECD), they shrunk by 6.5 million hectares – an area larger than the UK – between 2010 and 2015. What's more, 60% of vertebrates have become extinct since the 1970s, according to the World Wildlife Fund's 'Living Planet Report' for 2018<sup>2</sup>.

Another controversial piece of research published in recent months concerns the huge social cost of global warming. It concludes that the net cost of CO<sub>2</sub> emissions in economic terms is approximately USD417 per tonne worldwide – around 10 times higher than the current estimate of the U.S. government.



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<sup>1</sup> Bastin, Clark et al. "Understanding climate change from a global analysis of city analogue" July 10, 2019, ETH Zurich, <https://doi.org/10.1371/journal.pone.0217592>

<sup>2</sup> Source: World Wildlife Fund, <https://www.wwf.org.uk/updates/living-planet-report-2018>

<sup>3</sup> Ricke, Drouet et al. "Country-level social cost of carbon" October 2018, Nature Climate Change, <https://doi.org/10.1038/s41558-018-0282-y>



It also says the U.S. bears USD50 of this cost while India bears USD90 (the largest share of any country in the world)<sup>3</sup>; this in spite of the fact that the average U.S. citizen is responsible for CO<sub>2</sub> emissions of 16.5 tonnes per year, while the equivalent figure for the average Indian citizen is just 1.7 tonnes<sup>4</sup>.

Emerging and developing countries are particularly affected by developments in global warming; they are often more vulnerable to the effects of natural events due to their geographical location and the poor development of social security systems.

## 02 The ancient origins of sustainable thinking

These figures strongly support the idea of sustainability and that we need to prevent something negative. This is true in part, but it's about more. It's about doing something positive. It's about preserving nature's essentials for the Earth and for us. To do this successfully, we need a positive ecological future. However, we can't develop such a future until we really know what we are talking about, which in this case is more than a threat scenario.

For example, it is often mistakenly assumed that sustainability is a modern invention. However, a quick examination of the term's history shows us how we should understand it and what we need to do to make it a reality.

The importance of sustainability starts early, in prehistoric times. Prehistoric people practiced animism, which meant they considered all things had a living soul and spiritual power. Plants, rivers and stones were regarded as living things. Prehistoric animism played an especially important role in ethnic religions<sup>5</sup>. In the later Greek and Roman antiquity, there was no scientifically based ecological awareness, but there was something like a foreknowledge. For example, the *locus amoenus* – meaning “pleasant place” in Latin, and emblematic of the beauty and life-giving properties of nature – was a recurrent theme in literature and painting.

Meanwhile, the Ancient Egyptian culture depended directly on the fertility of the Nile. As German theologian Michael von Brück argued as part of the *Intercultural Ecological Manifesto*: “Political and economic action in ancient Egypt follows the natural cycle; it is not a counter-design to nature. The observance of this cycle and the legitimacy to rule are bound by each other... a sharp separation of nature and culture, of ‘base’ and ‘superstructure’, of economic and cultural action is by no means inevitable, but a problematic pattern of thinking.”<sup>6</sup>

As well as Europe and Egypt's approaches to nature, there were others in existence at the time. In Asia, the view of Buddhist teaching was mainly influenced by early animism. Earth and water must not be polluted because they are alive as part of the earth. In chronologies from the first millennium in Ceylon, now known as Sri Lanka, it is stated that Buddhist kings were expected to make an ecological and social contribution to the lives of their people.

The first school of Chinese Buddhism, the Tiantai, did not distinguish between animate and inanimate beings, meaning that nature, including animals and plants, is a part of creation; they spoke of a brotherhood, not only of all human beings, but of all living things<sup>7</sup>. The Chinese scholar Wang Yangming (1472-1529), who lived at the time of the Ming

Dynasty, summed up this concept. He wrote that heaven and earth and the myriad things in between are there to develop parts of a single body. This stems from the anthropomorphic cosmic worldview of Chinese Taoism, in which nature occupies the center of the universe, not man.

A few centuries later, it is worth noting the “Sun Song” of St. Francis of Assisi. This dates back to 1225 in the medieval western region and praises creation as a whole.

Sooner or later, as more considerations like this are expressed, we inevitably move closer to a definition of the relationship between man and nature, as well as between individuals and society. Thomas Aquinas, for example, dealt with the question of establishing a balance between individual freedom and common good, which is possibly the beginning of discussions around the idea of governance. The scholasticism<sup>8</sup> of the eleventh and twelfth century limited the powers of the authorities to general justice, which was intended not to interfere too much in the lives of citizens and encourage individuals to feel a personal responsibility to do good. But scholasticism also shows that, above all, it's about the “Bonum Comune”, i.e. the common good, which is understood as a counter term to the mere individual or group interests.

## 03 ESG during enlightenment and industrialisation

What we can deduce from this is still true today: societies have a continuous “structural responsibility” towards themselves, the environment and the future. Even Adam Smith, a moral philosopher and father of modern economics, wrote in *The Theory of Moral Sentiments* (published in 1759) that if governments neglect the protection of our livelihood and our earth to a criminal extent, the entire population suffers. In the present day, this rings true for climatic and environmental risks, as well as social aspects such as equality, inclusion and social justice.

In the early 19th century, it was the German scholar Alexander von Humboldt who regarded nature and man as a whole. He was inspired by his travels to the new world, as well as by the deforestation he observed in Venezuela, which led to the drying up of nearby lakes with devastating consequences for the ecosystem. A little later in the U.S., more people started to share these views of the world. They were the New England transcendentalists from the U.S. state of Massachusetts, a group of writers and philosophers active between 1836 and 1860 who saw nature as an organism and a moral educator<sup>9</sup>. They advocated a liberal, self-reliant and nature-orientated lifestyle and can be regarded as pioneers of the nature conservation movement.

<sup>4</sup> Source: The World Bank Group. Data status: 2014.

<https://data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=US>

<sup>5</sup> Klaus E. Müller: Animism. Keyword in: Walter Hirschberg (Found.), Wolfgang Müller (Red.): Dictionary of Ethnology. New edition, 2nd edition, Reimer, Berlin 2005, ISBN 3-496-02650-2 . P. 25.

<sup>6</sup> Michael von Brück, “Cultural Renewal – Ecology and Economics”, *Intercultural Ecological Manifesto*.

<sup>7</sup> DR Bhandarkar, Ashoka, Calcutta 1925, p. 220f.

<sup>8</sup> Scholasticism is the method of reasoning developed in the Latin-speaking scholarly world of the Middle Ages. The most famous part of scholastic literature today deals with theological issues. The term “scholasticism” is used to describe the epoch of the history of philosophy and theology, in which the scholastic method prevailed and shaped higher education.

<sup>9</sup> The most important representatives of this literary movement are the writers Ralph Waldo Emerson and Henry David Thoreau.



Finally, in the 20th century, the idea of Environmental Protection was gradually established in western industrial nations, mainly in the 1980s, on a social and political level, and was particularly prevalent in Europe. This period marked the official inclusion of environmental criteria in governments' agendas and in the consciousness of a broad section of the population.

This brief historical review shows that the understanding of sustainability, in the sense of harmony between humans, other living beings and the earth itself, is not only to respect nature (which we belong to) and the world we live in, but also to realize that most environmental and social challenges can only be solved in mutual dependence.

Sustainability is therefore our most original "World Heritage Site", and a term that is deeply rooted in many of our cultures around the world<sup>10</sup>. The Dictionary of the German language published by Joachim Heinrich Campe in 1807 defines the word "sustainability" as "that which one holds onto when nothing else holds any longer"<sup>11</sup>. From this, it can be deduced that sustainability is nothing more than a way to articulate our current nature, our responsibility to nature and finally to ourselves.

In 1979, in his book *The Principle of Responsibility*, Hans Jonas remarked for the first time in history that "humanity can annihilate itself and the whole world." For Hans Jonas, the relationship between man and nature is "not a relationship of domination but a relationship of responsibility." His central thesis, "Act so that the effects of your action are compatible with the permanence of genuine human life on earth," remains more topical than ever.

#### 04 ESG as a positive narrative

Whilst everyone is talking about what individuals can do and what should be done through politics, the international financial world is approaching the issue through concepts such as 'ESG investing', which enumerates the key areas in which we must act to protect the environment, ensure social progress and enhance corporate governance standards that support the development and prosperity of the global economy.

The abbreviation was first used in a report published by the United Nations in 2004 titled, "Who Cares Wins"<sup>12</sup>, which argued that the inclusion of ESG criteria in certain investment decisions could have a positive impact on society and financial markets, as well as on one's own portfolio<sup>13</sup>.

Since its inception, this abbreviation has become far more than a set of investment criteria. There are several style of investing that can be used to achieve ESG objectives. These include 'best in class' approaches and the exclusion of certain sectors and countries based on ESG factors. But essentially, any investments that can show a positive impact on certain ESG criteria are part of the ESG concept. The application of ESG criteria in the context of a portfolio is partly to help reduce risk, but also to show which companies are taking advantage of new opportunities, where new business models appear promising, how stable revenues can be generated, and that long-term sustainable profit growth is possible.

To sum up, "sustainability" is not something that can be imposed, and economic, legal and social systems that gradually destroy the environment cannot easily be made sustainable by

changing or renaming them. In order to achieve a real breakthrough, we need to think sustainably from the outset and plan ahead.

So, will it be worth it? Certainly. This is a positive narrative for our future.

Ecosystem services such as pollination of plants, water treatment, flood control and carbon sequestration are crucial to human well-being. Worldwide, these services are worth an estimated USD125-140 trillion a year<sup>14</sup>, i.e. more than one and a half times the global gross domestic product. Also, the benefits of "remedying" the environment can far outweigh the costs. For example, reaching the 'Bonn Challenge' goal – to restore 46% of the world's damaged forests – could mean a benefit of USD7 to USD30 for every dollar spent.

Biodiversity is a prime example of a key environmental issue that we can learn from; it is a prerequisite for human life. Cultural and gender diversity is just as important to the human and corporate existence as it is for natural biodiversity. It was and is the basis for innovation and therefore is the basis for productivity and prosperity as well.

Now look into the future. What is particularly interesting here is the potential for a "sharing economy", the economics of sharing and a change to "member value". The future will be more about the sharing of goods and resources between individuals and between companies – a process that will be stimulated and simplified by digitization. It will enable existing assets to be used more efficiently, lower costs and conserve resources – for example through rental concepts such as Airbnb<sup>15</sup>.

However, the potential disadvantages of so-called peer-to-peer sharing must also be taken into account, such as the adverse side-effects on competition and the use of data. In addition, a possible wage decline in the service sector, unfair competition practices in the digital world, a concentration of data and the establishment of a non-taxed "shadow economy" are all considered to be potential risks that must be addressed in terms of environmental, social and economic sustainability.

Thus, Hans Carl von Carlowitz's maxim from the year 1713, "No more trees should fall than can regrow", acts as a guide for our actions and remains highly topical today. Sustainability must be built into the "system" and not imposed retrospectively. The careful use of resources, environmentally friendly production processes, an integrated economic order for the preservation of our natural habitat and an inclusive understanding of growth and society are essential prerequisites for the transition to a sustainable era: ecological balance, economic security and social justice.

<sup>10</sup> The discovery of sustainability. Cultural History of a Concept", Ulrich Grober, 2010

<sup>11</sup> Ibid

<sup>12</sup> The Gobar Compact, "Who Cares Wins," United Nations, Swiss Federal Department of Foreign Affairs, 2004.

<sup>13</sup> When choosing an ESG investment, the various financial and ESG considerations need to be weighed to ensure they fit in with your overall strategy. Ultimately, your ESG investment strategy will be unique to you, so it's important to choose an investment partner who understands your specific ESG target

<sup>14</sup> OECD (2019), Biodiversity: Finance and Business Case for Action, report prepared for the G7 Environment Ministers' Meeting, 5-6 May 2019.

<sup>15</sup> Airbnb is a rental concept similar to Airbnb that connects owners of furnished properties with short-stay tenants, providing an alternative to traditional hotel bookings. Half the resulting revenue is invested in local sustainability projects that counteract the negative impacts of tourism.



## Glossary

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The [Bonn Challenge](#) is a global effort to bring 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030.

[ESG investing](#) pursues environmental, social and corporate governance goals.

[Fridays for Future](#) is a youth movement that has encouraged high-school students around the world to go on strike from school in order to join protests to demand action from governments on climate change.

The [Intergovernmental Panel on Climate Change \(IPCC\)](#) is an intergovernmental body of the United Nations, dedicated to providing the world with an objective, scientific view of climate change.

The [Organisation for Economic Co-operation and Development \(OECD\)](#) has 35 member countries and has the objective of encouraging economic progress and world trade.

[USD](#) is the currency code for the U.S. Dollar.



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