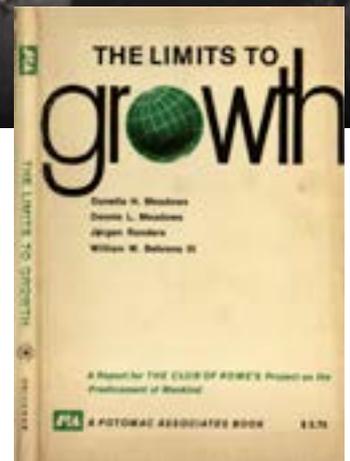


# A short history of a ground-breaking publication: **The Limits to Growth**



Conference at Dartmouth College. From left to right: Jørgen Randers, Jay Forrester, Donella Meadows, Dennis Meadows, William Behrens.

In March 1972, a report by a group of young scientists at the Massachusetts Institute of Technology (MIT) commissioned by Aurelio Peccei, founder of The Club of Rome, shook the world. Today, 50 years after its publication, “The Limits to Growth” is considered one of the most important and controversial environmental books of all time and it continues to influence conversations around sustainability and our continued existence on this finite planet. Below is the story behind this ground-breaking publication.



- In April 1968, Aurelio Peccei, an Italian industrial manager, economist, and visionary, brought together a group of thirty scientists, educators, economists, humanists, industrialists, and civil servants from ten countries around the world at the Accademia dei Lincei in Rome, Italy.
- Out of this meeting grew The Club of Rome, at first an informal group of people which aimed to foster understanding of the varied but interconnected components that make up the global system; to bring that new understanding to the attention of policymakers and the public globally; and thus, promote new policy initiatives and action.
- Following a series of early meetings, The Club of Rome decided to initiate an ambitious project to explore the “Predicament of Mankind” by examining the complex problems faced by humanity. These included poverty in the midst of plenty; degradation of the environment; loss of faith in institutions; uncontrolled urban development; insecurity of employment; alienation of the youth; rejection of traditional values; and inflation and other monetary and economic disruptions.” (The Limits to Growth, 1972).
- In August 1970, the Club of Rome tasked a small group of young scientists under the direction of Professor Dennis Meadows to undertake a study incorporating intertwined problems at the aggregated world level in an effort to define the physical limits to population growth and the constraints resulting from economic activities on the planet.
- The MIT group designed and ran their global computer model, World3, based on the work of Jay Forrester, to understand the causes and consequences of exponential growth in the global social and economic system. The model focused on five variables, namely population, food production, industrial production, persistent pollution, and the consumption of non-renewable natural resources.
- The team’s analysis led them to three central conclusions:
  - If the present growth trends in population, industrialisation, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity.



Presentation at the Smithsonian. From left to right: William Behrens III, Jørgen Randers, Aurelio Peccei, Dennis Meadows, Donella Meadows (obscured by podium), and William Dietel

- It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realise his individual human potential.
- If the world's people decide to strive for this second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances of success.
- The findings of the study were first presented in Ottawa, Moscow and Rio de Janeiro in 1971.
- In early 1972, the group of 17 scientists represented by Donella Meadows, Dennis Meadows, Jorgen Randers and William Behrens, published their findings in a book titled "The Limits to Growth," which became one of the most influential texts of the 20th century.
- Despite widespread criticism and even ridicule from, among others, politicians, economists, business leaders, the press and fellow academics, "The Limits to Growth" quickly became a best-seller, eventually selling well over 3 million copies in 35 languages and marking a turning point in the way people think about the environment.
- "The Limits to Growth" has since been the subject of many subsequent publications.
- In 1992, the authors of "The Limits to Growth" published a 20-year update to the original publication titled "Beyond the Limits", in which they conclude that two decades of history mainly supported the conclusions advanced in the original publication.

The 1992 publication, however, also offered one major new finding, namely that humanity had already overshoot the limits of Earth's support capacity.

- In 2004, the authors gathered once again to publish a follow-up publication titled "Limits to Growth: The 30-year update", observing that: "It is a sad fact that humanity has largely squandered the past 30 years in futile debates and well intentioned, but halfhearted, responses to the global ecological challenge. We do not have another 30 years to dither. Much will have to change if the ongoing overshoot is not to be followed by collapse during the twenty-first century."
- On its part, the Club of Rome has published more than 40 reports intended to help further understanding of major global issues and to foster a greater sense of civic responsibility since commissioning the seminal "The Limits to Growth" report 50 years ago.
- Building on the legacy of "The Limits to Growth" and the vision of The Club of Rome to contribute to an interconnected world with a new way of being human that promotes wellbeing for all in a healthier ecosystem, the organisation and its partners remain committed to applying holistic, interdisciplinary and long-term thinking to ensure broader societal and planetary wellbeing; to move towards more equitable economic, financial, and socio-political models; ensure an inclusive human dimension to all systems change; and to emerge from emergency through the work done under its [five impact hubs](#).

## The Limits to Growth, 1972 - key messages

- The physical limits to growth, with existing policies, would likely be exceeded within one generation.
- The most likely outcome of reaching these limits would be overshooting them followed by systems decline.
- The findings however also suggested a viable alternative to these outcomes – one in which population growth and material production could be brought

into balance with planetary limits.

- The fourth conclusion was that it would realistically take 50 to 100 years, or even more, to make this alternative outcome a reality.
- Finally, the team found that every year action is delayed toward reaching the alternative outcome decreases the number of options available to avoid overshoot and collapse.