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Born in 1929. Erich Becker-Boost holds a diploma in chemical engineering and a doctorate in natural science from the Technical University of Darmstadt. He also studied business finance at Georgetown University.

Erich Becker-Boost first worked in research and development with an engineering firm in the fields of energy and environmental processes and new petrochemical materials. He was also engaged in the start-up of industrial plants in India and other countries. Between 1962 and 1968, Erich Becker-Boost served with an energy corporation, responsible for planning and implementation of oil refining, fertiliser and plastics industry projects. Subsequently, he joined the International Finance Corporation in Washington, a part of the World Bank Group. Until 1988, Erich Becker-Boost first worked in the field of project appraisal in many countries and then as a Director of the Joint Programme of the World Bank and the UN Organisation for Industrial Development in Vienna. He focussed on the promotion of joint venture projects between industrial and developing countries as well as on economic analysis. Erich Becker-Boost also acted as Chairman of international working groups and conferences, e.g. on industrial growth targets and on project financing. In 1989, Erich Becker-Boost started to work as an independent consultant dealing with merger and acquisition projects in Europe and China.

He is a Co-Founder of the Austrian Chapter of the Club of Rome. Many patents and publications emerged from his work. Erich Becker-Boost is also Co-author of "Growth without limits. Global prosperity through sustainable economic activity".

He received Austrian, German and other highly esteemed Orders of Merit.

Theses

**No Limits to Growth?
No Limits to Growth!**

One of the generally accepted central goals for global governance is to balance the apparent contradiction between demands of humans, including ecological challenges versus objectives of the economy. As an attempt to bridge this gap, the 2004 Report to the Club of Rome titles "Sustainability creates new prosperity". Economic growth is one of the preconditions of prosperity. Minimised – not maximum – growth rates are the real threat to required growth. Only if due to a lack of governance excessive growth cannot be absorbed, it may cause social disturbances or damages to our environment, or both. Therefore, economy on a global and national level must grow, it can and it will grow.

1. Material and energy resources are available in unlimited quantities for all generations to come, provided we will be returning to natural material and energy cycles, and presupposing that we are ready to accept substitutes for those resources, which may become (also due to increasing political and climatic risks) too dangerous or difficult to explore, produce and transport, and therefore too expensive for use.

Most forecasts proved to be too pessimistic. We are not leaving behind us a "plundered, looted earth" – but knowledge and experience how to get access to, and intelligently use natural resources. Human creativity succeeded in ever increasing the efficiency of discovering, producing and applying natural resources. We should continue to trust in such ingenuity. It is mankind's most valuable resource.

2. We are not consuming raw material – we are "only" using it. Chemical elements are not depleted by using them. Those substances for which recovery from technical material cycles is too expensive, or which are vanishing through chemical decomposition or ultimate dissipation, can be substituted – also by renewable material. Due to decreasing demand for raw material per industrial unit and change in technologies, real prices have decreased over the past decades for most raw materials, and none of them has become exhausted as forecasted.

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3. Long before oil and natural gas reserves will be exhausted, they will become more and more expensive, and will therefore never “disappear”, but be reserved as valuable feed stocks for high-priced products. As an energy carrier, hydrocarbon material can and must be replaced by “solar”, hydrogen and other renewable energy – thus, also reducing CO₂ emissions. Solar, hydro, geothermic and nuclear energy together offer an unlimited supply of energy.
4. Economic growth does not imply any deterioration of environment since all factors describing its quality are improving with increasing GDP/c. However, achieving and maintaining a clean environment (e.g. by avoiding, eliminating or reducing liquid and gaseous effluents) requires adequate financing, which reduces the net financial benefit of economic growth. Bad political and corporate governance may disregard such needs, which is however an expression of human greed and not a consequence of growth.

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Born in 1951. Gernot Klepper holds a diploma in economics from the University of Heidelberg and earned a Master as well as a Ph.D. in agricultural economics from the University of Kentucky.

He started his academic career at the South Asia Institute of the University of Heidelberg and at the University of Mannheim. In 1984, Gernot Klepper joined the Kiel Institute for World Economics. His first research interests were oriented towards industrial and trade policy issues and later towards environmental and resource allocation problems. Since 1995, he has been Head of the Research Department “Environmental and Resource Economics” at the Kiel Institute for World Economics. Gernot Klepper was a research fellow at the Center for Economic Policy Research (CEPR) and is currently a research fellow at the European Academy in Ahrweiler.

Gernot Klepper is also Co-Chairman of the German National Committee on Global Change Research constituted by the German Research Foundation and the Federal Ministry of Education and Research.



Theses
No Limits to Growth?
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- Economic growth depends on the availability of natural resources, capital, labour and knowledge.
- Since limits to growth exist for all factors of production except for knowledge, innovation is the major determinant for achieving sustainable growth.
- For the scarcity of natural resources as limits to growth, the focus has shifted from stocks – the resources available or usable on earth – to flows of resources. Prominent examples are the disturbances to global material cycles brought about by an increasing use of resources such as the carbon cycle, water cycles, or the nitrogen cycle.
- Sustained growth is feasible if human ingenuity succeeds in using natural resources, capital, and labour in a way, which does not provoke a change in the earth system dynamics with dangerous impacts on humans.