Ugo Bardi

# The Limits to Growth Revisited



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# The Limits to Growth Revisited

Foreword by Ian Johnson



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ISSN 2191-5520 e-ISSN 2191-5539 ISSN 2191-7876 ISBN 978-1-4419-9415-8 e-ISBN 978-1-4419-9416-5 DOI 10.1007/978-1-4419-9416-5 Springer New York Dordrecht Heidelberg London

Library of Congress Control Number: 2011928230

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Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

This book is dedicated to the memory of Matthew Simmons (1943–2010), supporter of "peak oil" studies, advocate of renewable energy, and one of the first to take a new look at "The Limits to Growth" in the twenty-first century.

From "Agamennon" by Aeschilus; words of Cassandra (\*)

More bright shall blow the wind of prophecy, And as against the low bright line of dawn Heaves high and higher yet the rolling wave, So in the clearing skies of prescience Dawns on my soul a further, deadlier woe, And I will speak, but in dark speech no more.

## **Foreword**

The report to the Club of Rome entitled *The Limits to Growth* (LTG) was published in 1972 and is regarded as one of the most influential books of the twentieth century. Its messages left deep impressions on many individuals worldwide who today can be found in influential positions in politics, administration, civil society, or academia. LTG was the catalyst that opened our minds to the truth about the precarious state of the planet. Its authors founded a body of thinking that continues to this day.

The core message that was contained in LTG, and reinforced in two later versions, most recently in 2004, was that in a finite world, material consumption and pollution cannot continue to grow forever. When LTG was published, it created a widespread discussion which quickly turned from a scientific debate into a political one, driven by ideology and special interests. Despite often being depicted as such, none of the LTG studies were a prediction of unavoidable doom. Rather, LTG "pleaded for profound proactive, societal innovation through technological, cultural and institutional change, in order to avoid an increase in the ecological footprint of humanity beyond the carrying capacity of the planet." Although LTG warned about the direction the world was heading in and the possibility of collapse, it was also optimistic about changes that could be brought about if society began to recognize the state of global development and take corrective actions. All too often critics chose to ignore the core messages of the report.

What was considered as futuristic 40 years ago has now become the reality of today. We are already in "overshoot" in a number of fields, and it is becoming obvious to more and more people that we have entered into a dangerous era: global warming, peak oil, biodiversity extinction, and reduced ecosystem resilience to name a few. In some cases, we have substitutes but at very high costs; in other cases such as biodiversity, we have much less knowledge on the impacts of the destruction taking place.

As the Secretary General of the Club of Rome, I welcome the range of issues covered in this timely book, *The Limits to Growth Revisited* by Ugo Bardi. His book allows us to better understand the controversy following the release of LTG while

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at the same time gain insights into "dynamic modeling" and some of the key arguments debated. It should be a "must read" for those interested in our common future, and a better understanding of how good science and analysis can be misinterpreted and maligned.

Ian Johnson

Secretary General of the Club of Rome and former Vice President for Sustainable Development, World Bank

## Acknowledgements

Let me thank first of all Jay Wright Forrester, pioneer of system dynamics; though in his late 80s when I started writing this book, he nevertheless, provided me with insights, information, and much help on the story of world dynamics. I would also like to thank Dennis Meadows and Jorgen Randers, two of the authors of the first "The Limits to Growth" book who helped me delve into the complex story of their study. I would also like to thank Karl Wagner and Ian Johnson the Club of Rome for their support as well as Colin Campbell and all the members of the Association for the Study of Peak Oil (ASPO).

Finally, I wish to thank all those who offered advice, criticism, or who helped in other ways in the making of this book: Janet Barocco, Nicola dall'Olio, Charles Hall, Richard Heinberg, Marek Kolodzej, Magne Myrtveit, Giorgio Nebbia, David Neiman, Jorgen Noorgard, William Nordhaus, Alessandro Lavacchi, David Packer, Douglas Reynolds, David Roser, Gail Tilverberg, Leigh Yaxley, and Richard Worthington.