

# **Friede-Gard-Prize for Sustainable Economics 2023**

## **- awarded to Professor Jørgen Randers**

The Friede-Gard-Prize 2023 is awarded to Professor emeritus Jørgen Randers (Oslo).

Professor Randers has achieved global fame by being one of the main authors of the epoch-making report to the Club of Rome from in 1972: “The Limits to Growth” that was sold in millions of copies in more than 36 languages worldwide.

He has also been one of the main authors of all the follow-up-reports to the Club of Rome over the decades: “Beyond the Limits – Confronting Global Collapse, Envisioning a Sustainable Future” (1992), “Limits to Growth – the 30 Years Update” (2004), “2052 – A Global Forecast for the next Forty Years” (2012), and “Earth for All – A Survival Guide for our Planet” (2022).

He has been dedicated for his whole scientific career – which meanwhile is more than 50 years – to studies of the future based on system dynamics modeling, applying the dynamic and non-linear perspectives of systems thinking as founded by Professor Jay W. Forrester in the 1950s and 1960s. During the years Randers has applied system dynamics thinking to various social systems, from individual corporations, via economic sectors, to the national economy, and increasingly on the eco-bio-physical world system. Randers followed, and contributed to best system dynamics practice, by maintaining a non-equilibrium and multidisciplinary perspective on the problem at hand. His models of global ecological, social, and economic processes have become more and more refined, incorporating the newest solid insights of the various scientific disciplines.

Professor Randers receives the Fried-Gard-Prize 2023 for (1) his decades-long commitment to the system dynamics based world modeling (as opposed to the widely used, utility-optimizing equilibrium models of the neoclassical school) and - by this means - (2) his tireless provision of practicable scenarios for a more sustainable global future – contrasting these to base case scenario characterized by continuation of the current decision-making style, and (3) his “Earth for All”-model from 2022 as a culmination point of years of continuous improvements. In this model – the first practical integrated global assessment model that runs in seconds on a laptop - the environment with land use, energy and climate change is modeled, as well as the economic and social aspects with the population dynamics, production and investment, unemployment and distribution of the produced welfare.

The system dynamics approach to modeling is – from the point of view of the Friede-Gard-Foundation – far superior to the optimization (of utility) approach of the neoclassical mainstream. System dynamics includes nonlinear cause-and-effect relations, interdependencies and delayed feedbacks. System dynamics modeling seeks to clarify the effects over time of change in policy. The resulting time paths (scenarios) are much more helpful to policy makers and the public, than the exact position of the ultimate equilibrium (which in most cases never will be reached because conditions change before the system reaches its new equilibrium). Mainstream economics favors the study of different equilibria, calculated under very unrealistic assumptions, because they lack the mathematical tools necessary to follow the dynamics of the system on its way towards an equilibrium that is always in motion. The current belief in neoclassical circles that there is a global economic optimum, that gives an ‘optimal’ climate warming of +2,7° in 2100 with limited loss of

global material welfare. Such conclusions are obviously based on untenable assumptions, a disregard for distributional effects that may bring down the social system, and ecological tipping-points.

The prize awarding ceremony for Professor Randers will be held on Thursday, October 12<sup>th</sup> 2023, starting at 6 p.m. at Umwelt-Campus Birkenfeld. Participants are welcome at the campus (limited number of seats) and online.

On the following day there will be a scientific symposium with Professor Randers.

Further information on Professor Randers is available at [www.umwelt-campus.de/friede-gard-preis](http://www.umwelt-campus.de/friede-gard-preis) .

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*The Friede-Gard-Prize for Sustainable Economics is an award for scientific achievements, which represent a important progress of economics with regard to establishing an economical, ecological and socially sustainable economy and society.*

*The prize is endowed annually by the Friede-Gard-Stiftung, a charitable foundation founded in 2020 ([www.friede-gard-stiftung.de](http://www.friede-gard-stiftung.de)). It is worth 10.000,-€.*

*The Friede-Gard-Stiftung cooperates with the University of Applied Sciences Trier/ Umwelt-Campus Birkenfeld/ Section of Ecological Economics and Environmental Law ([www.umwelt-campus.de/friede-gard-preis](http://www.umwelt-campus.de/friede-gard-preis)).*