

## CURRICULUM VITAE

### **JORGEN RANDERS**

Professor emeritus  
Climate strategy  
Department of Law and Governance  
BI Norwegian Business School  
0442 Oslo  
NORWAY

#### **GENERAL INFORMATION**

Address	Abbedisvingen 6 N-0280 Oslo, Norway
Phone	+ 47 - 92 24 06 87
E-mail	jorgen.randers@bi.no
Date of Birth	22 May 1945
Nationality	Norwegian
Marital Status	Married, one child
Google scholar score	49.158

#### **EDUCATION**

PhD Management	Massachusetts Institute of Technology, 1973
MS Solid State Physics	(cand.real) University of Oslo, 1968

#### **PROFESSIONAL FIELD**

Model-based futures studies, scenario analysis, system dynamics, sustainability, climate, energy and ecological economics

#### **CURRENT ROLE**

Advisor on global sustainability matters – model building, speaking and writing

#### **PROFESSIONAL EXPERIENCE**

1981-	<b>BI Norwegian Business School, Oslo</b> (management education) President 1981-89 Professor 1985-2015
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- 1994-99 Professor emeritus 2015-  
**WWF-World Wide Fund for Nature, Geneva**  
(non-governmental organization, nature conservation)  
Deputy Director General
- 1993 **Innovation AS, Oslo**  
(consultants in strategy)  
Partner
- 1992-93 Full time Board Chair of **Scandinavian corporations**  
(see below for details)
- 1989-91 **World City AS, Oslo**  
(financial holding company)  
Managing Director
- 1981-89 **BI Norwegian Business School, Oslo**  
(management education)  
President 1981-89
- 1980-81 **Deminex (NORGE) AS, Oslo**  
(oil production)  
Deputy Director
- 1980 **Ministry of Long-Term Planning, Oslo**  
(macroeconomic planning)  
Analyst
- 1974-80 **Resource Policy Group, Oslo**  
(futures research)  
Founder and Director
- 1973 **Massachusetts Institute of Technology, Cambridge MA**  
Assistant Professor of Management

## CORPORATE BOARDS

Member of corporate boards (chair when marked \*)

- 2011-15 Posten ASA (the Norwegian Postal Service)
- 2006-14\* yA Bank AS (internet banking)
- 2002-03 Kanal24 Norge AS (commercial radio)
- 1999-03\* eBok AS (electronic publishing)
- 1999-16\* 21<sup>st</sup> Venture AS (holding company, largely radio and IT)
- 1999-05 Egroup ASA (internet consulting)
- 1992-96\* P4 Radio Hele Norge AS (commercial radio)
- 1992-94\* David Livsforsikrings AS (life insurance)
- 1991-10 Tomra Systems AS (recycling)
- 1989-91\* Green Business AS (environmental goods and services)
- 1988-92\* The Norwegian Bank for Industry (banking)
- 1988-93\* Åke Larson Construction AS (construction management)
- 1984-87 Unique AS, Sandnes (software house)
- 1983-93\* Sven Sejersted Bødtker & Co. AS (ship-owners)
- 1983-85 Tiki Data AS (PC producer)
- 1982-92 Åke Larson Construction AB, Stockholm (construction management)
- 1981-85\* Sunnmørsbanken Oslo AS (commercial banking)

## ADVISORY BOARDS AND COUNCILS

2019-	Center for the Ecological Civilization, Institute for Xi Jinping Thought on Socialism with Chinese Characteristics, Peking University, Beijing (Director)
2018-	China Association for The Club of Rome, Beijing (Founding board chair)
2015-18	The Club of Rome, Winterthur (ExCom member)
2014-17	AstraZenca, London (Environmental Sustainability Council member)
2004-08	WWF International, Gland (International Board and Exco member)
2003-07	Miljøforskningssenteret AS (Board member)
2003-	The Global Footprint Network, San Francisco (Advisory Council member)
2001-08	WWF-Norway, Oslo (Board chair)
2001-12	British Telecom plc, London (Leadership Panel member)
2000-04	Norwegian Research Council (Committee on Environment and Development)
2000-06	Fondation du Tour du Valat, Sambuc, France (Board member)
2000-15	Dow Chemical Company, Midland MI (Corporate. Environmental Advisory Council member)
1988-93	Norwegian Institute for Market Research (Board chair)

## CONSULTING (selected)

2019-20	Daimler AG, Stuttgart (Future of Mobility)
2016-17	China Council for International Cooperation in Environment and Development, Beijing (Green Transition Strategy for China to 2050)
2015-18	DNV-GL, Oslo (Future of Spaceship Earth Project)
2015-17	Seoul Metropolitan Government (Special advisor to Mayor Park Won Soon)
2014-16	Shanghai Academy of Social Sciences, Shanghai (Shanghai 2050 Plan)
2005-06	Norwegian Ministry of Environment (Chair Commission on Reduction of Climate Gases)
2004-07	Economic Development Board of Rotterdam (International Advisory Board)
2002-06	Various corporate clients (Future Mappers forecasts for the real estate market)
2001-12	Cambridge Sustainable Development Institute, Cambridge (Core faculty in HRH Prince Charles' Business and Sustainability Program)
2001-02	Global Reporting Initiative (GRI), Washington (Core Measurement Group)
1998-02	OECD, Paris (Roundtable on Sustainable Development)
1985-06	Various corporate clients (Future Mappers forecasts for the shipping market)
1985-87	Norwegian Ministry of Social Affairs (Commission on Health Sector Reform)
1980-86	World Futures, New York (Editorial council)
1979-83	OECD, Paris (Social effects of forest investment projects)
1979	United Nations Development Program (UNDP), Dacca (Planning a Petroleum Institute in Bangladesh)

## PROFESSIONAL ASSOCIATIONS

1977 -	The Club of Rome, Rome Full member 1977-82, 2012- Member of Exco 2015-18 Chair China Association for The Club of Rome 2018 -
1976-	The System Dynamics Society, Cambridge, MA Member 1976- President 1985-86

## HONORARY APPOINTMENTS

- 2018 Honorary Researcher, School of Marxism, Peking University, Beijing  
2016 Honorary Professor, Fudan Institute for Advanced Study in Social Science, Shanghai  
2013 Honorary Professor, Anglia-Ruskin University, Cambridge

## BOOKS

- Dixson-Decleve S, Gaffney O, Gosh J, Randers J, Rockstrøm J, Stoknes PE. 2022. **Earth for All**. New Society Publishers: Gabriola Island, British Columbia
- Randers J, Rockstrøm J, Stoknes PE, Goluke U, Collste D, Cornell S. 2018. **Transformation is feasible!** Stockholm Resilience Center: Stockholm  
<https://www.clubofrome.org/publication/transformation-is-feasible/>
- Randers J, Maxton G. 2016. **Ein Prozent ist Genug**. Oekom Verlag: München  
Available as Maxton G, Randers J. 2016. **Reinventing Prosperity**. Greystone: Vancouver
- Randers J. 2012. **2052 – A Global Forecast for the Next Forty Years**. Chelsea Green Publishing: White River Junction, VT. Available in 13 languages
- Meadows DH, Randers J, Meadows DL. 2004. **Limits to Growth - The 30 Year Update**. Chelsea Green Publishing: White River Junction, VT. Available in >15 languages
- WWF International (Loh J, Randers J, et al). 1998. **The Living Planet Report**. WWF International: Gland, Switzerland. Updates appear every second year or so.
- Meadows DH, Meadows DL, Randers J. 1992. **Beyond the Limits**. Chelsea Green Publishing: White River Junction VT. Available in >15 languages
- Randers J (ed). 1980. **Elements of the system dynamics method**. MIT Press: Cambridge MA
- Ervik L, Tank-Nielsen C, Nunn D, Randers J. **Smelteverkene i smeltedigelen** (The Future of the Electro-Metallurgical Industry). 1979. J.W. Cappelens forlag, Oslo 1979
- Randers J, Stenberg L, Kalgraf K. 1978. **Skognæringen i overgangsalderen** (Transition in the Forest Sector). J.W. Cappelens Forlag: Oslo
- Meadows DL, Behrens WW, Meadows DH, Naill RF, Randers J, Zahn EKO. 1974. **The Dynamics of Growth in a Finite World**. Wright Allen Press: Cambridge, MA
- Randers J. 1973. **Conceptualizing Dynamic Models of Social Systems: Lessons from a Study of Social Change**. Ph.D. dissertation, MIT Sloan School of Management, Cambridge MA
- Meadows DH, Meadows DL, Randers J, Behrens WW. 1972. **The Limits to Growth**. Universe Books: New York. Available in 36 languages

## SCIENTIFIC PAPERS (selected)

Collste D, Cornell SE, Randers J, Rockstrom J, Stoknes PE. 2021. "Human well-being in the antropocene: limits to growth". **Global Sustainability**, Vol 4

<https://doi.org/10.1017/sus.2021.26>

Stoknes P.E., Aslaksen I, Goluke U, Randers J, Garnåsjordet PA. 2021. "Plausible Futures for the Norwegian Offshore Energy Sector: Business as Usual, Harvest or Rebuild?" **Energy Policy** (under peer review)

Randers J, Goluke U. 2020. "An earth system model shows self-sustained melting of permafrost even if all man-made GHG emissions stop in 2020". **Scientific Reports** Vol 10, 18456, 9 pp

<https://doi.org/10.1038/s41598-020-75481-z>

Randers J, Rockström J, Stoknes P., Goluke U, Collste D, Cornell S. & Donges, J. 2019. "Achieving the 17 Sustainable Development Goals within 9 planetary boundaries". **Global Sustainability** Vol 2, E24, pp 1-11

<https://doi.org/10.1017/sus.2019.22>

Randers J. 2019. «Grønn vekst i Norge mot 2050» («Green growth in Norway towards 2050»). **Magma** Vol 19 No 5, pp 17-24

Randers J, Goluke U, & Callegari B. 2017. "MODCAP – A general dynamic model of a modern capitalist economy". **Proceedings of the International System Dynamics Conference 2017** Boston, MA. Version September 4, 2017.

Randers J, Goluke U, Wenstøp F, Wenstøp S. 2016. "A user-friendly earth system model of low complexity: the ESCIMO system dynamics model of global warming towards 2100". **Earth System Dynamics** Vol 7, pp 831–850

<https://doi.org/10.5194/esd-7-831-2016>

Randers J. 2016. "How fast will China grow towards 2050?". **World Economics** Vol 17 No 2 April-June pp 63-78

Randers J. 2016. "A political platform for rich nations towards 2050". **Solutions** Vol 7, No 1, pp 25-28, March

<http://www.thesolutionsjournal.org/node/237445>

Randers J. 2015. "Demokratin oförmögen att hantera klimahotet" ("Democracy is unsuited to handle threats like climate change"). **Extrakt**: Stockholm, January

[www.extrakt.se/debatt-opinion/demokratin-oformogen-att-hantera-klimahotet](http://www.extrakt.se/debatt-opinion/demokratin-oformogen-att-hantera-klimahotet)

Randers J. 2014. "A realistic leverage point for one-planet living: More compulsory vacation in the rich world". **System Dynamics Review** Vol 30, No 4, pp 264-282

<http://dx.doi.org/10.1002/sdr.1522>

Randers J. 2014. "2052 - Japan: a global world leader in increasing citizen's well-being during slow GDP growth and declining population". **Fole**: Tokyo, 2, pp 2-5

Randers J. 2013. "Global Trends 2030 Compared with the 2052 Global Forecast" **World Future Review**, Volume 5, No 4, pp 360-366  
<http://doi.org/10.1177/0123456789123456>

Randers J. 2012. "2052: Droht ein globaler Kollaps?" ("2052: Towards Global Collapse?") **Aus Politik und Zeiteschichte**, Vol 62, No 51-52, pp 3-10

Randers J. 2012. "GEVA – Greenhouse Gas Emissions per Unit of Value Added. A corporate guide to voluntary climate policy". **Energy Policy**, Vol 48, pp 46-55  
<http://dx.doi.org/10.1016/j.enpol.2012.04.041>

Randers J. 2012. The real message of The Limits to Growth: A plea for forward-looking global policy". **GAIA** Vol 21, No 2, pp 102-105

Randers J, Gilding P. 2012. "The One Degree War Plan". **Journal of Global Responsibility**, Vol 1, No 1, pp 170-188  
<http://dx.doi.org/10.1108/20412561011039762>

Randers J. 2011. "Meny 5 – En vedtakbar klima- og energiplan for Norge til 2020" ("Menu 5 – A feasible climate and energy plan for Norway to 2020"). **Magma** Vol 14, No 2, pp 21-34

Randers J. et al. 2009. "ENKL-planen. En energi og klima plan for Norge til 2020» («An Energy and Climate Plan for Norway towards 2020»). Report from BI Klimastrategi/Energi Norge/NTNU Energiforskning, 9. mars

Randers J. 2008. "Global Collapse – Fact or Fiction?" **Futures** Vol 40, No 10, pp 853 – 864, Dec  
<http://www.sciencedirect.com/science/article/pii/S001632870800092X>  
[doi: 10.1016/j.futures.2008.07.042](http://doi.org/10.1016/j.futures.2008.07.042)

Randers J, Isachsen AJI. 2007. "Fremtidsbilde 2030: Er verden flat?" ("Scenario 2030: Is the world flat?"). **Magma** Vol 10, No 1, pp 51-57

Randers J, Golüke U. 2007. "Forecasting turning points in shipping freight rates: lessons from 30 years of practical effort", **System Dynamics Review** 23 (2-3)

Randers J, Alfson K. 2007. "How Can Norway Become a Climate-Friendly Society?". **World Economics** Vol 8, No 1, Jan-Mar

Loh J, Green RE, Ricketts T, Lamoureux J, Jenkeins M, Kapos V, Randers J. 2005. "The Living Planet Index: using species population time series to track trends in biodiversity". **Philosophical Transactions of the Royal Society B: Biological Sciences**, Vol. 360, pp 289 - 295, February

Randers J. 2005. "Sammenligning av kostnadene ved stasjonær og mobil røntgenundersøkelse av sykehjemspasienter" ("Comparison of the costs of stationary and mobile x-ray imaging of nursery patients"). **Michael Quarterly** No 2, pp 151–9.

Wackernagel M, Schultz NB, Deumling D, Linares AC, Jenkins M, Kapos V, Monfreda C, Loh J, Myers N, Norgaard R, Randers J. 2002. "Tracking the ecological overshoot of the human economy". **Proceedings of the (US) National Academy of Sciences**, Vol. 44, No. 14, pp

9266 - 9271, July

Randers J. 2000. "From Limits to Growth to Sustainable Development"  
**System Dynamics Review** Vol. 16, No. 3 pp 213-224

Randers J. 1994. "The Quest for a Sustainable Society - A Global Perspective"  
in Skirbekk G (ed). **The Notion of Sustainability**, Scandinavian University Press: Oslo

**The Public Management of Forestry Projects**

with H. Gregersen, J. Montgolfier, L. Ferrer-Martin, OECD, Paris 1986

"Prediction of pulp prices. A review two years later"  
**BI Working Paper** 84/6, Stiftelsen BI, Bekkestua 1984

"The Tanker Market"  
**BI Working Paper** 84/9, Stiftelsen BI, Bekkestua 1984

"Guidelines for Model Conceptualization"  
in B.W. Hennestad and F.E. Wenstøp, editor, **Bedriftsøkonomi og Vitenskapsteori**  
(Management and Theory of Science), Universitetsforlaget, Oslo 1983

"Den norske næringsstruktur i fremtiden" (Norway's Economic Structure in the Future)  
**Bergen Bank Kvartalsskrift**, No. 1, 1981

"National Strategies to Limit the Industrial Use of Wood to the Sustainable Forest Growth"  
with J. Høstelend and L. Lønnstedt  
**Journal of Business Administration**, Vol. 11, No. 1 & 2, Fall 1979/Spring 1980

"Den unødvendige arbeidsløsheten" (The Unnecessary Unemployment) with J.W. Nilsson  
in **Arbeid og Inntekt** (Employment and Income), Tiden Norsk Forlag, Oslo 1980

"Guidelines for Model Conceptualization" in J. Randers (ed), **Elements of the System Dynamics Method**, MIT Press, Cambridge, Massachusetts 1980

Lønnstedt L, Randers J (eds). 1979. **Wood Resource Dynamics in the Scandinavian Forest Sector** Studia Forestalia Suecia No. 152, Stockholm

"Watch for the Foothills: Signalling the End to Growth in a Finite World"  
with W.W. Behrens, in David W. Orr and Marvin S. Soroos, **The Global Predicament: Ecological Perspectives on World Order**, The University of North Carolina Press 1979

"Petroleum: Norwegian Experience and Third World Policy"  
**Jamaica Journal**, No. 43, pp. 69-76, 1979

"Transition Strategies for the Forest Sector" with L. Lønnstedt  
**Futures**, Vol 11, No. 3, June 1979

"Den globale økonomiske utvikling på 10-15 års sikt"  
(The Global Economy of the Next 10-15 Years)  
**Bergen Bank Kvartalsskrift** No. 4, 1978

"How to be a Useful Builder of Simulation Models", in J. Rose (ed.)  
**Current Topics in Cybernetics and Systems**, Springer, New York 1978

"How to Stop Industrial Growth with Minimal Pain"  
**Technological Forecasting and Social Change**, Vol 11, p. 371, 1978

"A System Dynamics Study of the Transition from Ample to Scarce Wood Resources"  
**Proceedings of the XVI International Union of Forest Research Organizations' World Congress**, Oslo 21-26 June 1976

"A Response to Sussex" with D.L. Meadows, D.H. Meadows, and W.W. Behrens  
**Futures** Vol. 5, No 1, February 1973

"Dynamic Modelling as a Tool for Managerial Planning: A Case Study of the US Hog Industry" with R.F. Naill, N.J. Mass and M.K. Simpson  
**Proceedings of the 1973 Summer Computer Simulation Conference**, Montreal 1973

"The Dynamics of Environmental Policy: DDT"  
**The International Journal of Environmental Studies**, Vol. 4, p. 51, 1972

Randers J, Meadows DL. 1972. "The Dynamics of Solid Waste Generation". **Technology Review**, April 1972

Randers J, Meadows DH. 1972. "The Carrying Capacity of the Globe". **Sloan Management Review**, Vol 15, No. 2. Reprinted in numerous anthologies.

Randers J, Meadows DL. 1972. "Adding the Time Dimension to Environmental Policy"  
**International Organization**, Vol. 26, No.