



Short Curriculum Vitae for Bent Erik Sørensen, born 13. October 1941 in Copenhagen, citizen of Denmark.

Education and degrees:

1965: Cand. scient. (M.Sc.), physics and mathematics
1974: Lic. scient. (Ph.D.) degree in physics from the Niels Bohr Institute.
1991: Diploma in Advanced Management, INSEAD, Fontainebleau, France.

Employment and business:

1962-1965: Teaching assistant at Departments of Mathematics, Astronomy and Physics, University of Copenhagen.
1965-1980: Research Associate and Associate professor at NORDITA & Niels Bohr Institute.
1988-1991: Technical Director, COWIconsult, Consulting Engineers and Planners.
1972-: Independent consultant at NOVATOR Advanced Technology Consulting and at NOVATOR Art & Music
1980: Professor of physics at Institute of Mathematics and Physics, from 2006 Department of Environmental, Social and Spatial Change, Roskilde University. From November 2008: Professor emeritus, same place.

Sabbatical appointments:

1967-1993: Yukawa Research Institute for Fundamental Research, Kyoto, Japan; Lawrence Radiation Laboratory, University of California at Berkeley; Wright Nuclear Structure Laboratory, Yale University, New Haven, Connecticut; Centre Nationale de la Recherche Scientifique, Institut des Sciences Nucléaires, Grenoble; Université 1 de Grenoble, France; Solar Energy Research Institute, Golden, Colorado; Australian Commonwealth Department of Education, Canberra; University of New South Wales, School of Electrical Engineering and Computer Science, Photovoltaic Centre, Sydney, Australia.

Miscellaneous:

Several prizes, incl. Danish Solar Energy Prize and European Solar Energy Prize. Knighted by Her Majesty Queen Margrete of Denmark (1989, Order of Dannebrog). Chairman of government committees, board member of several scientific journals. Lead author, the Intergovernmental Panel on Climate Change's Second Assessment Report Working Group II on Mitigating Measures and UNDP World Energy Assessment team. Consultant to Danish and international organisations, industries and governments.

Projects and presentations:

Some 25 externally financed research projects, several of which as project leader (see <http://energy.ruc.dk>). About 500 presentations at international conferences, and technical and scientific seminars. Music lectures at several Danish universities. Musical compositions performed at Louisiana Museum, Copenhagen Music Conservatory and in radio programmes of Danish Broadcasting Corp.

Publications:

About 700 monographs, articles in scientific journals, technical reports and conference papers. The journal articles have appeared in Nuclear Physics, Physics Letters, Physical Review, Physical Review Letters, Science, Wind Engineering, Solar Energy, Ambio, Energy Policy, Energy, American Scientist, Ecodecision, Natural Resources Forum, Annual Review of Energy & Environment, Int. Journal of Global Energy Issues, Int. Journal of Sustainable Development, Water, Air and Soil Pollution, Sekai, Journal of Peace Research, Cooperation and Conflict, Bulletin of the Atomic Scientists, Philosophy and Social Action, Science and Public Policy, New Scientist, Nature, Nuclear Safety, Renewable Energy, Int. Journal of Hydrogen Energy, Int. Journal of Energy Research, Int. Journal of Green Energy, Journal of Archaeological Science, Journal of Anthropological Anthropology. Popular writing includes monographs on energy policy, alternative defence planning, superstring research, computer science, music, development issues and philosophy of science, as well as articles in newspapers and magazines.

Some selected publications are:

- Energy and Resources, *Science*, **189**, pp. 255-260, 1975
- A simple model of Economic Growth or Decline under the influence of Resource Depletion, *J. Appl. Math. Mod.* **1**, 24-28, 1976.
- *Renewable Energy* (946 pp), (1979, 2nd ed. 2000, 3rd ed. 2004, 4th ed. 2010). Elsevier Academic Press
- Policy aspects of Life-cycle Assessment. pp. 285-289 in *Life-cycle Analysis of Energy Systems*, OECD/IEA, Paris 1993
- Technology Change: the actor triangle; Grassroots in motion. In *Philosophy and Social Action* **19**, 7-12 (1993), **20**, 25-31 (1994).
- History of and recent progress in wind-energy utilization. In *Annual Review of Energy & Environment*, **20**, 387-424, 1995.
- Energy supply mitigation options (with Ishitani, *et al.*). In *Climate Change 1995*, IPCC (Working group II), 587-647. Cambridge UP, 1996.
- Impacts of energy use, *Human ecology, human economy* (Diesendorf, Hamilton, eds.), pp. 243-266, Allen & Unwin, Sydney 1996
- A high-technology rural development model, in *Power development strategies for the 21st century*, 1157-1164. Oxford & IBH, New Delhi, 1996.
- Energy Scenarios (with Nakicenovic, Kram, Makarov, Yokoboro, Fengqi), pp. 333-366 in *World Energy Assessment*, UNDP, New York, 2000.
- *Hydrogen and Fuel Cells*. (450 pp) Elsevier Academic Press (2005, 2nd ed. 2011/12).
- *Renewable Energy Conversion, Transmission and Storage* (337 pp), Elsevier Academic Press, Boston, 2007.
- A renewable energy and hydrogen scenario for northern Europe. *Int. Journal Energy Research* **32**, 471-500, 2008
- Pathways to climate stabilisation. *Energy Policy* **36**, 3505-3509, 2008.
- A new method for estimating off-shore wind potentials. *Int. Journal Green Energy* **5**, 139-147, 2008
- Energy use by Eem Neanderthals. *Journal Archaeological Science*, **36**, 2201-2201, 2009.
- *Renewable Energy Focus Handbook* (with da Rosa *et al.*, 575 pp). Elsevier Academic Press, London, 2009.
- On the road performance of Battery, Hydrogen and hybrid cars. In *Electric and Hybrid Vehicles* (G Pistoia, ed.), Elsevier, Amsterdam, 2010.
- *Renewable Energy. Earthscan Reference Collection* (4 vols., B Sørensen, ed.): 5 introductory articles, Earthscan Publ., 2010.
- Demography and the extinction of European Neanderthals. *Journal Anthropological Archaeology*, **30**, 17-29, 2011.
- *Life-Cycle Analysis of Energy Systems. From Methodology to Applications* (345 pp). RSC Publishing, Cambridge. 2011.
- Mapping potential renewable energy resources in the Mediterranean region. In *Recent Developments in Energy..*(E Maleviti, ed.). Athens, 2011.
- Energy storage and other ways of handling intermittent energy production. In *Carbon-neutral Fuels and Energy Carriers*, Taylor & Francis, 2011.
- *A History of Energy. Northern Europe from the Stone Age to the Present Day*. Earthscan/Routledge/Taylor & Francis, Cambridge, 2011/12.
- *Energy Intermittency*, CRC Press, Boca Raton, Taylor & Francis, 2014 (in press).
- *Solar energy storage* (ed.), Elsevier Academic Press, 2015 (in preparation).