

Details available online at http://nicta.com.au/nicta_events/big_picture

National ICT Australia invites you to the Victoria Research Laboratory Big Picture Seminar Series Wednesday April 22, 2009

The talk will be followed by light refreshments and an opportunity to meet the speaker.

REGISTRATION IS ESSENTIAL FOR THIS FREE EVENT
RSVP to vr1ss@nicta.com.au by Monday 20 April, 2009

Public Parking is available at an hourly rate at the University Square car park. Enter via Bouverie Street. Local street parking is also available.



When: 4-5pm, Wednesday April 22, 2009

Where: Brown Theatre, Electrical & Electronic Engineering (Building 193), University of Melbourne, Parkville

Rod Tucker, BE(Hons), PhD, FAA, FTSE, FIEEE, FIE (Aust), FOSA A Green Internet

ABSTRACT: Energy consumption and greenhouse gas emissions have become social and political issues of global importance and long-term significance. Much attention is currently being paid to reducing the energy consumption of transportation, industry, buildings, and other infrastructure. In this context, it is also desirable to obtain an understanding of the influence of information and communications technologies (ICT) on overall global energy consumption, and to develop strategies for controlling the growth of energy consumption of ICT. In this talk, Prof Tucker will focus on the energy consumption of the Internet and related communications technologies. The Internet has both positive and negative impacts on energy consumption. On the one hand, the transmission, switching, and data storage equipment that underpins the network consumes significant electrical energy, and this consumption is growing rapidly as the capacity and reach of the Internet expand. On the other hand, the Internet offers potential for saving energy in other sectors, through travel replacement, efficiency improvements in industry and through better management of resources. He will give an overview of research aimed at understanding the greenhouse impact of in the Internet, and at devising approaches to minimizing this energy consumption.

BIOGRAPHY: Rod Tucker is an Australian Research Council (ARC) Federation Fellow and a Laureate Professor at the University of Melbourne. He is Research Director at the ARC Special Research Centre for Ultra-Broadband Information Networks (CUBIN). He has held positions at the University of Queensland, the University of California, Berkeley, Cornell University, Plessey Research, AT&T Bell Laboratories, Hewlett Packard Laboratories, and Agilent Technologies. He joined the University of Melbourne in 1990. Professor Tucker is a Fellow of the Australian Academy of Science, a Fellow of the Australian Academy of Technological Sciences and Engineering, a Fellow of the Optical Society of America, and a Fellow of the Institute of Electrical and Electronics Engineers (IEEE). From 1995 to 1999, he served as a member of the Board of Governors of the IEEE Lasers and Electro-Optics Society. Professor Tucker received the BE (Elec) degree from the University of Melbourne in 1969, and the PhD degree, also from the University of Melbourne, in 1975. In 1970 he was awarded the Fisk Prize by the Institution of Radio and Electronics Engineers, Australia, and in 1975 he was awarded a Harkness Fellowship by the Commonwealth Fund, New York. In 1997 he was awarded the Australia Prize, Australia's premier international award for science and technology, for his contributions to telecommunications. He has been named one of ISI's Highly-Cited Researchers.

