

IEEE PES Sri Lanka Chapter

organizes a talk on

“Wind and Solar Power development: Where is Europe heading?”

By

Mr. Erik Lysen

Director of LYSEN Consulting Engineer, Netherland.

Tuesday, 30th April 2019, 10.30 am to 11.30 am

**@ DEEE Seminar Room, Faculty of Engineering, University of
Peradeniya**

All are Welcome!!!

Abstract: *The presentation starts with a brief description of the European electricity system, and how that is rapidly changing, in order to accommodate ever larger shares of renewables.*

Wind Power in Europe is discussed: now predominantly on-shore capacity, but rapidly growing offshore capacity. Technology development: wind turbines for offshore are becoming larger and larger, now 10 MW and growing. New developments are shown, such as the first hydrogen producing turbine.

Finally, Solar Power is discussed, which is a typical global industry, with a dominant position of China. Technology: mono- and multicrystalline silicon are still dominant, and module efficiencies continue to grow, reaching the theoretical limits. Country data are provided for notional contributions to the demand. The famous learning curve of course, with recent cost data. And finally a few typical applications of PV on unexpected surfaces.

Biography: Erik Lysen is director of LYSEN Consulting Engineer in The Netherlands. LCE is specialized in (1) energy conservation, (2) renewable energy and (3) cleaner use of fossil fuels, his Trias Energica . After his retirement in 2011 he became Board Member and in 2014 Chairman of Holland Solar, until end 2016. In that capacity he was co-founder of the NVDE, the Netherlands Organisation for Renewable Energy. From 2011 until 2016 he chaired various committees to evaluate project proposals for the TKI Urban Energy, and was senior advisor to the IEA Photovoltaic Power Systems program. In 2013-2014 he was contracted by RMA Energy to participate in the ADB funded Renewable Energy Masterplan study for Sri Lanka.

In April 2017 he was awarded the Royal decoration “Officer in the Order of Oranje-Nassau” for his worldwide efforts to promote renewable energy sources.

In 1998 he set up the Utrecht Centre of Energy research (UCE), at Utrecht University, and was its managing director until end 2011. UCE was a collaborative institution from Utrecht University, RIVM, ECN, REMU and Ecofys. There he initiated and managed a broad range of energy efficiency and renewable energy projects, as well as the national Dutch CCS program.

In 2009 Lysen set up and managed the Utrecht Centre for Earth and Sustainability (UCAD), a collaborative effort between Utrecht University, KNMI, TNO, Deltares en KWR. UCE and UCAD joined in 2011 to form the Utrecht Sustainability Institute (USI).

From 2007 - 2009 Lysen was director of the FACT Foundation, initiated prof. Kees Daey Ouwens. FACT supported partners in developing countries until 2013 with projects on the production and utilization of biofuels for local development. The knowledge collected by FACT has been transferred in 2014 to a new foundation, Bioenergy Forum FACT (BFF), chaired by Lysen.

From 1992 to 1998 Lysen managed the national research programmes on solar photovoltaics, solar thermal energy, heat and cold storage and long term options for the built environment at the Netherlands Energy & Environment Agency NOVEM. He represented the Netherlands in the Executive Committees of the IEA Solar Heating and Cooling programme and the IEA Photovoltaic Power Systems Programme, which he chaired from 1998 until 2001.

Lysen was energy consultant at DHV Consulting Engineers from 1982-1987 and from 1987-1992 as independent consultancy LCE. He carried out energy missions in Sri Lanka, India, Philippines, China, Indonesia, for World Bank, ADB and Ministry of Foreign Affairs.

From 1975 to 1982 he worked at CWD on wind energy for developing regions, and wrote “Introduction to Wind Energy” while teaching at the Asian Institute of Technology (Bangkok) in 1981. In 1977 he was team leader of the first UN-ESCAP Roving Seminar on Rural Energy Development, in Thailand, Philippines, Iran and Indonesia. In the same year he published “Eindeloze Energie” (Endless Energy), the first book in Dutch about renewable energy sources.

Mr. Lysen has an MSc in Electrical Engineering at Eindhoven University of Technology (1972).