Paul Neelands, BSc(Hon), MSc
Year-Round Solar Aquaponics Greenhouse for YGH

I would like to introduce Paul Neelands, BSc(Hon), MSc, who will speak to us this evening on his proposed design for a Year-Round Solar Aquaponics Greenhouse for the Yorklands Green Hub.

Paul is a man of wide-ranging interests and work experience. He began his career teaching physics and computing at Queen's University. He left academia to embrace communal living and turn his skills in electronic and program design to a fascinating series of projects.

Paul's design work includes a computerized vessel traffic management system for Vancouver, development of the UNIX computer operating system which was the predecessor for open-source LINUX, and research and development in supercomputing, computer graphics and animation and disk controllers. He was a consultant to the team that produced the first full-screen computer-animated movie scene in George Lucas' 1st and 2nd Star Trek movies.

He collaborated on developing a mirror-bright welding process (seamless computerized welding) for both aesthetic uses and nuclear reactor safety. He designed equipment (an X-ray elipsometer) to help crack the difficult challenge of developing white LEDs.

For Northern Telecom, Paul analyzed the effects of solar wind on satellites. For Bombardier, he computer-modeled aircraft wings for small planes, to optimize lift and drag. For electricity transmission operators, he designed a lightening-strike simulator to safety-test electrical grid equipment.

One day in the middle of all this, he was invited to instrument the performance of the systems at PEI's leading-edge ARK, an experimental bioshelter designed to provide a new model for sustainable living.

Paul lives off grid on a 100-acre farm in a house he designed and built 30 years ago.

Welcome Paul Neelands.