

Cannabis Grown Green

Less Water and Energy



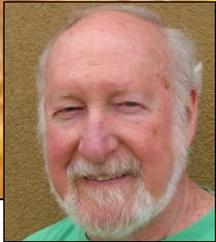
An Evening Seminar with Dr Larry Kinney



Monday, August 10, 6:00 – 8:00 PM

Rawlings Public Library, Ryals Special Event Room

100 E. Abriendo Ave., Pueblo, CO 81004 (719) 562-5600



Larry Kinney is President and CTO of Synergistic Building Technologies, a research and development company in Boulder specializing in systems that achieve energy efficiency in buildings. Active in energy conservation research for over 40 years, he has broad experience in fenestration systems, efficient lighting and natural daylighting technologies, air handling and conditioning systems, electronic sensors and controls, and energy-efficient greenhouses and other buildings. Larry has conceived and directed a number of energy research, development, and demonstration projects, including several large commercial greenhouses whose carbon footprints are tiny. He is the co-holder of five US patents and has authored over 200 publications and reports to clients including dozens in the daylighting and greenhouse fields. Larry did undergraduate work in Physics and Philosophy at Davidson and Rhodes colleges and holds a PhD in Philosophy from Syracuse University.

Raising cannabis indoors in America has an annual electricity bill of over six billion dollars—and it's climbing rapidly. Estimates are that ten percent of the output of the entire electric grid in the Denver area presently goes to cannabis grows. In California the number is 3%. Most of the electricity is used to power inefficient, poorly-controlled lighting, necessitating the mechanical cooling of overheated growing spaces. This talk briefly documents that and related "business as usual" problems, shows why conventional greenhouses are unlikely to solve the problems while cost effectively maintaining security and good productivity, and explores a number of potentially-promising solutions for both new and retrofit applications.

This seminar is designed for commercial marijuana growers but is open to private growers and the public. For more information call (719) 330-3360 or email tcorlett@cresenergy.org. There is no fee to attend the seminar, but a \$5 donation is appreciated.

- * Making judicious use of carefully-monitored and controlled sunlight and moderate quantities of efficient electric light distributed appropriately;
- * Employing several varieties of fixed and moveable insulation that can enhance light on plants (lowering it to zero for naptime, aka light dep), limit nighttime thermal losses in the winter six to ten fold, and avoid light pollution;
- * Separating the space conditioning function from the ventilation function, to the net benefit of the efficiency of each while enhancing relations with neighbors.