

**PROPOSED NEW KSD NON-PROFIT
IMPORTANT INNOVATIONS CENTER**

PURPOSES

- **Provide a place where small inventors can get help in evaluating and developing their ideas.
- **Provide a place which will focus specifically on inventions that have the potential to benefit the world and its people.
- **Provide a place which will especially focus on solutions to energy needs – and to environmental pollution and other damage.
- **Provide a place to enable people interested in doing good rather than getting rich to network and cooperate on accomplishing this kind of change in our world.

MEANS

- **Invite ideas to be submitted and considered.
- **Focus on those inventors who don't have a large corporation or prestigious university behind them.
- **Vet the submissions for both efficacy and social value.
- **Locate funding sources that will support such work.
- **Locate local and regional businesses interested in marketing and/or manufacturing new and beneficial designs and products.
- **Connect resources with inventors and their ideas.
- **Support projects that utilize such innovations for good.

WHAT NOT TO DO: Turn over any of this to large multi-national corporations to exploit for their own gain.

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(Working with small local businesses, farmers & non-profits)

**NEW! KSD BUILD IT-YOURSELF SOLAR GREENHOUSE
DESIGN PACKAGE IS IN DEVELOPMENT!**

Especially great for farmers! It will include licensing for our patented design features, plans & drawings, instructions – and a real live savvy consultant to help you site and build. (Additional consulting time beyond the basic number will be available for an hourly fee.)



Patent #8408199. Paul Klinkman

This will mean that folks can get a sturdy, state-of-the-art greenhouse for little money down, & a big return on their investment as they are able to run their greenhouses over the winter with no fossil fuel cost.

ONE FARMER'S STATEMENT: As a production greenhouse grower and farmer here in RI, I think that anyone in the business would benefit by using the solar greenhouse. This project has really piqued my interest because I grow a lot of greenhouse vegetables and the heating cost is making it tougher to make a living, as it cuts right into the profit margin. I built all the greenhouses I have myself to help defray the cost. I believe that if this solar greenhouse could be built by the farmer, it would definitely be more cost effective & very popular with growers. *Art Mello (Mello's Farm Stand, Portsmouth, RI)*

THE UNIQUE KSD BUSINESS MODEL



****PROVIDE A KSD DESIGN PACKAGE KIT THAT WILL ALLOW FARMERS & OTHER HANDY PEOPLE TO BUILD THEIR OWN GREENHOUSES**

****INCLUDE EXPERT CONSULTATION & TECH SUPPORT TO ASSIST THEM THROUGHOUT THE PROCESS OF BUILDING..**

****TRAIN ABLE LOCAL PEOPLE AS HELPERS ABLE TO DO THE ON-SITE ASSISTANCE IN VARIOUS PARTS OF THE CCOUNTRY.**

##PROVIDE TRAINING TO LOCALLY OWNED SMALL BUSINESSES SUCH AS SHEET METAL SHOPS TO MANUFACTURE DESIRED PARTS, SUCH AS THE SOLAR CONCENTRATING COLLECTORS.

****WORK TO DEVELOP A NETWORK OF LOCAL RESOURCES THAT COULD MARKET, MANUFACTURE & INSTALL GREENHOUSES. SOME MIGHT ALSO PRODUCE & SELL BIOFUEL FROM ALGAE.**

****INCLUDE NON-PROFIT ORGANIZATIONS, AS PARTNERS THAT COULD RAISE MONEY FROM SELLING THE KITS & SUBSIDIZE OR GIVE UNITS TO COMMUNITY GARDENS, FOOD BANKS, ETC.)**

****DEVELOP A RESIDENTIAL VERSION THAT COULD PROVIDE GARDENING & SUN SPACE, AS WELL AS SUPPLEMENTARY HEAT TO AN ADJACENT HOUSE.**

NEW KSD GREENHOUSE TECHNOLOGY



2007 EXPERIMENTAL MODEL IN N. SMITHFIELD, RI BACK YARD

****BASICS:** The greenhouse's linear reflecting trough keeps reflected sun on target for most of the day. Light concentrated through the window spreads out inside. For building permitting purposes our greenhouse is a "temporary structure".



WORKING PROTOTYPE Attleboro. MA. 2008-12

****A SUNNY SPACE:** We've found that our greenhouse's linear reflecting trough keeps the reflected sun coming through the target window for most of the day. Inside, light deconcentrates and is reflected around to optimal strength sunlight on the plants.

****GROWING FACTORS:** Our greenhouse can grow plants on supermarket-style shelves, for easy cart-to-shelf transfers. . Our solar powered air circulation system simultaneously creates some air movement on the plants (avoiding mold problems) and stores the afternoon's solar heat in gravel underfoot. Grow lights use little solar/battery power & extend type of crops that we can grow. Primary products are perishable vegetables in winter, live plants for spring planting, flowers, fish/animal feed and heat.

****HEAT CONTROL:** A heat-actuated vent door will pop open in the event of overheating, The Attleboro prototype made it through the winter of 2010 without any freezing, and we've added improvements since then.