

## SOLAR HOT WATER BUSINESS COUNCIL



### ***Innovators Forum* at SOLAR THERMAL '10**

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#### **1. What suggestions do you have for manufacturers for cost effective design modifications or technical improvements for solar thermal to be implemented today?**

##### **Installations**

- Create package systems that are more like *appliances*, easier for consumer to understand
- Increase the ease of installation to reduce installation time
- Package systems for easy delivery and install
- Create different package systems for different sizes or needs
- Reduce shipping costs
- Increase availability of components, and reduce fulfillment time
- Improve integration between collector and roof (flashing)
- Provide installer education on specific products to decrease install time
- Provide information on *live loads* for installers that need to work with structural requirements
- Address grounding issue

##### **System Components**

- Exterior pipe insulation and/or easy insulation options
- Improve appearance and R-Value
- Integrated sensor wire
- Create inexpensive alternate to double wall heat exchangers
- Pump stations
- Pro-active alarms/controls
- Improve variable speed pump options
- Pump stations w/ adapters to be switched between US and Metric
- Standardization in controls, including sensors
- Bigger tanks for more storage
- Larger collectors for larger solar applications
- Increase manufacturers' warranty to 20-30 years
- Invest more research on fluids, thermal storage, and phase changing
- Provide standard racking and mounting options
- Provide technical specs so installers and mix and match components if needed
- Create well temperature standards for all panels from manufacturer
- Address issue with double wall heat exchangers
- BTU meter options

##### **Other**

- Support *solar-ready* requirements for new constructions
- Take cues from European industry practices with longer history, good data to compare, established standards and best practices
- Evaluate and consider manufacturing global standards
- Address structural engineering issues to help installers deal with new municipal requirements
- Integrate solar thermal with existing plumbing code on national level
- Bring gas backup to US from EU

## 2. What new policies, or policy changes, are needed at federal, state, or local level?

### Policies

- Maintain consistency and predictability of programs and incentives
- Create policies that have long term impact to encourage stability in marketplace
- Change double wall heat exchanger requirement: they are not necessary
- SRCC : Adopt OG 300 as a standard
- Simplify or streamline SRCC certification: Reduce time to certification of panels or systems
- Consider national solar codes
- Thermal efficiency test rather than combustion effect
- Encourage a solar mandate, RPS with solar carve out
- Create equal priorities and initiatives between SHW and PV
- Streamline local permitting issues with single solar permit (reduced cost)
- Raise bar for “qualified” installers
- Require solar, or solar ready design, on new construction
- Ensure solar access for properties

### Financing or Incentives

- Performance based incentives
- National RPS or Feed In with SHW considerations
- Extend tax credits
- Additional incentives to solar to level the playing field with fossil fuels (5-1 currently)
- Bring back PACE as financing option
- Sales tax exemption on solar products
- On bill financing, with utility support
- Consider *Energy Improvement Mortgages*
- Property appraisals should reflect the added value of solar
- Uniform and long-lasting incentives and programs (MN has issue with maintaining incentives)
- Provide incentives for solar thermal, not just solar hot water
- Community incentives supporting locally grown products
- Consider system leasing, third-party ownership ideas
- Replace federal grants for solar projects with a revolving loan fund for continuation of public-interest projects (based on HUD)

### Awareness

- Increase education and creative marketing to make solar real for consumer
- Conduct studies to show home values with solar
- Address payback issue, compared with cash flow
- Train inspectors, code officials and appraisers in solar
- Promotion of SHW as an appliance vs. a complicated system

### 3. How do you market solar thermal so it's appealing to the mainstream end user?

#### Large Marketing Plan

- Industry needs marketing plan
- Consistent positive message
- Industry members need to agree and support marketing efforts
- Utilize celebrity endorsements, create visible ambassador like Smokey Bear, Woody Owl or gain traction with green movement by national channels: PBS=Powered by the Sun
- Make it sexy and trendy: Electric pays back, what is the equivalent for solar thermal?
- Invest in industry and consumer education, increase public visibility and community awareness
- Utilize demographics of existing owners to target low hanging fruit
- Use lessons learned from PV industry to raise awareness

#### Community or Neighborhood Scale

- Yard signs
- Word of mouth, follow up strengths
- Neighborhood group-buy programs
- Put SHW systems on end cap at a hardware store
- Community incentives supporting locally grown products
- Encourage SHW at businesses; employees will take that common practice home with them
- Make it trendy, foster neighbor envy

#### Professional Considerations

- Provide training for contractors on marketing and customer services
- Improve O& M, and follow up from installers
- Offer maintenance contracts, which lends credibility to installers
- Offer lease/buy options or third party ownership
- Make it easier to find qualified installers, increase installer base
- Work with organizations to make systems visible (Habitat for Humanity, libraries, parks etc) with demonstration sites, visible kiosks, etc
- Make buying a system as easy as buying a truck: offer financing, service, purchase all together

#### Consumer Considerations

- Make things simpler for the consumer
- Need to refine and certify payback
- Reduce the risk factor for consumers
- Simplify the math of the bottom line
- Simplify the technology
- How to make SHW look "new" like PV
- Make system buying process pleasurable