

CIRA also has a well developed distribution system and is experiencing good sales. With further technical work, usage could grow somewhat, but probably not dramatically.

Five of the semi-commercialized innovations have significant unresolved problems that inhibit full acceptance and use. The Hotbox method to test the performance of wall systems is now an established tool. Development of a standardized dynamic Hotbox test, however, would improve the quality and credibility of the performance data being generated, and would lower costs per Hotbox run. Greater dissemination of Hotbox results to contractors and builders would increase their utilization of Hotbox test results. End-users need to become more familiar with the results of Hotbox tests.

For the heat pump water heater, as with the supermarket refrigeration compressor system, inadequate training on the part of the service infrastructure (plumbers and HVAC service personnel) responsible for the installation, repair, and maintenance of water heaters hinders adoption. Encouraging major real estate developers to install HPWHs could result in the development of local expertise in maintenance and replacement. The generation of further end-use demand (particularly among innovators) might also "pull" the technology along.

The non-sophistication and cost effectiveness of radiant barriers makes it very promising as a means of saving energy in the South. To encourage its diffusion and to guard the public against fraud, DOE needs to widely disseminate both price and performance information. DOE should also examine the cost-effectiveness of radiant barriers in cold and moist climates.

Further technical development of the tracer gas testing procedure is needed to produce more consistently accurate results. DOE should review the