



Thermal Socket

An important infrastructure requirement for thermally driven cooling systems

Sustainable Cooling

Small scale absorption cooling systems, especially for residential applications, have the potential to cut electrical energy use up to 85% in space cooling in hot & tropical countries. However, these systems need a thermal source at the desorber end or in short thermal energy must be made available as that is the main driver for these systems. This is precisely where the 'thermal socket' will come into play as an important infrastructure, to accelerate deployment.

What is a thermal socket?

The thermal socket is a simple socket, akin to an electrical socket. It will have a supply port and a return port (see figure above). The supply port will be delivering hot fluid (between 80 & 90 °C) and the return port will send the used hot fluid back to the thermal network.

What is the source of thermal energy?

The source of thermal energy for the thermal socket can stem from multiple sources - solar thermal or district hot water network or anything else.

How will it aid in sustainable cooling solutions?

Provides a means to readily connect a working absorption cooling system to the heat source (once the infrastructure is available)

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