Once the heater is turned off, the temperature in spaces without phase-change materials (pcm) for latent heat storage drops quickly (red graph). The use of pcm, in contrast, leads to a significantly more level temperature profile (green graph).

When the heater is turned on again, the thermal energy is stored in the pcm for later release in the form of heat.

The room is perceived to be more evenly warm (blue graph), even with reduced room temperature.
Why should you...
heat an entire bus with expensive hot air
► when only a few passengers are on board?
► when the hot air will quickly escape whenever the doors are opened?

The innovative solution
► Targeted heating of only those areas where passengers are sitting or standing.
► Heat radiation instead of hot-air blowers. Heat-radiating elements provide better heat retention than air, which will quickly escape whenever the doors are opened.

You benefit from
► Targeted heat distribution and improved heat retention
► Reduced energy consumption and costs

Advantages
► Selectively controllable via sensors that detect the presence of passengers
► Immediate heat release (Quick-PCM)
► When the doors are open, heat stored and radiated by PCM does not get lost as quickly as hot air
► Heating elements can be cleverly integrated in window-sills, interior liners, seats, arm rests, seat backs etc.
► Radiated heat is perceived as more constant and thus more comfortable than heat provided by hot air blowers
► IoT (Internet of Things): individually controllable systems can be interconnected
► Suitable for power systems with voltages between 24 v and > 700 v