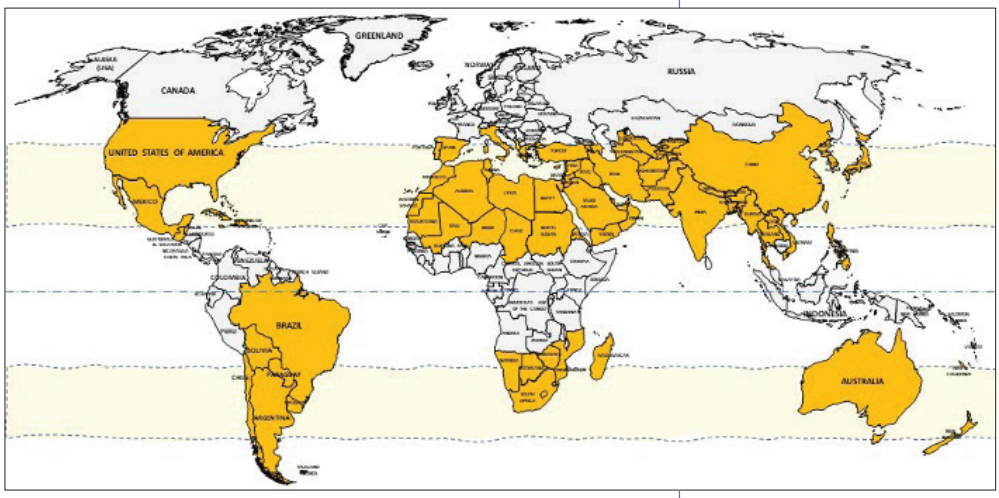
Task 65

New Solar Cooling Project

The new project, Task 65: Solar Cooling for the Sunbelt Regions, builds upon our past four solar cooling Tasks. This Task will be different in that it focuses on innovations for affordable, safe, and reliable solar cooling systems in sunbelt regions. The primary driver for continuing this work is that air-conditioning accounts for nearly 20% of the total electricity demand in buildings worldwide and is growing faster than any other energy use in buildings. If measures are not taken to counteract this increase, the demand for space cooling will almost triple by 2050, with estimates reaching 6,200 TWh or 30% of the total electricity use in buildings.

The Task's main objective is to adapt, verify, and promote Solar Cooling as an affordable and reliable solution across Sunbelt countries. The existing technologies need to be adapted to the specific boundaries and analyzed and optimized in terms of investment, operating cost, and environmental impact (e.g., solar fraction) as well as be compared and benchmarked on a unified level against reference technologies on a life cycle cost basis. To ensure that the Task has the largest impact it can, experts will work with Mission Innovation's Innovation Challenge #7, Affordable Heating and Cooling of Buildings (MI IC7).



▲ **The sunbelt regions represent the sunny, hot-arid, and hot-humid climates between the 20th and 40th degrees latitude in the northern and southern hemispheres.**

Over the next four years, an international team of experts will focus their work on solar thermal and solar PV driven systems between 2 kW and 5,000 kW in size. The Task will be divided into four work areas 1) Adaption, 2) Demonstration, 3) Assessment & Tools, and 4) Dissemination.

Are you interested in learning more about this project? Contact Uli Jakob, uli.jakob@drjakobenergyresearch.de.

"One exciting aspect of this Task is the planned cooperation with industry and target countries like the UAE through MI IC7. Linking SHC Task work with Mission Innovation activities and funding opportunities will no doubt help the market uptake of solar cooling in sunbelt regions."

ULI JAKOB, *SHC Task 65 Operating Agent*