

In the Pipeline

New Work

Two new Tasks are now underway! If you're interested in joining and are from an, IEA SHC member country, it's as simple as two steps: contact your national SHC Executive Committee member and reach out to the Task Manager.

Solar Photoreactors for the Production of Fuels and Chemicals

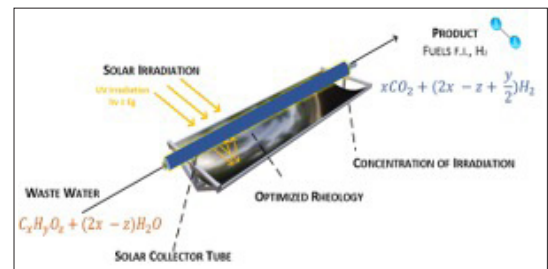
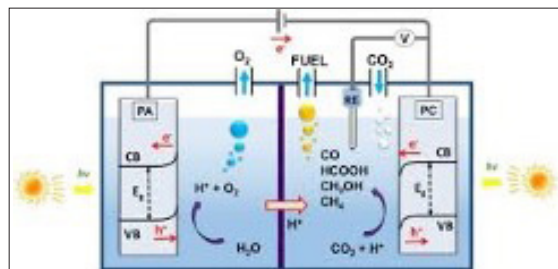
Fact – Decarbonization requires a change in our energy supply and hybridization. Green fuels will and can meet industrial energy demand (e.g., hydrogen) in combination with CO₂ energy carriers (e.g., methane, methanol, ethanol). But today, 99% of H₂ for industrial use is from non-renewable energy sources!

That is what one would call an untapped potential for solar reactors. The demand for “green” energy sources is increasing, and using the sun to produce them is a win-win.

Participants in this Task will collaborate to offer detailed insights and strategies for optimally using photoreactors under actual sunlight to produce green fuels and chemicals. The aim is to present technological solutions that improve the efficiency of solar energy utilization by integrating the latest advancements in materials, reactor design, and system integration.

Are you an expert on photo-active materials, photo-reactor and collector design, or system integration? Do you want to collaborate with an international team on designing materials, reactors, and systems and developing standardized testing and evaluation protocols to pave the way for future solar photo reactors as new market segments for the solar thermal industry?

To learn more, visit the SHC Task 72: [Solar Photoreactors for the Production of Fuels and Chemicals webpage](#). To explore opportunities for joining the Task, contact the Task Manager, Dr. Bettina Muster-Slawitsch, at b.muster@aee.at.



(Source: Kalamaras, 2018)

PVT Heating Systems – Markets, Trends and Future Potential

PVT Technology is rather new to the market, making strategic market preparation crucial for its successful adoption. Without this information, the technology can easily be underestimated, and its potential may be overlooked. Since PVT must compete with established solutions, its positioning in relation to other heating technologies is key to unlocking its full potential. To address this, the Task participants will work to: 1) create factual awareness about PVT Heating Systems (air and liquid heating), 2) Identify and tackle hurdles in the innovation systems around PVT heating systems, 3) Foster and activate the industry and research community on PVT heating systems, and 4) Initiate and multiply PVT heating installations and projects.

Are you working in the solar thermal, PV or heat pump sectors or for a PV manufacturing or system design/planning company? Would you like to collaborate with an international team to help advance PVT heating systems?

To learn more, visit the SHC Task 73: [PVT Heating Systems webpage](#). To explore opportunities for joining the Task, contact the Task Manager, Dr. Korbinian Kramer, korbinian.kramer@ise.fraunhofer.de.

(Source: Solar Heat Worldwide 2024)

