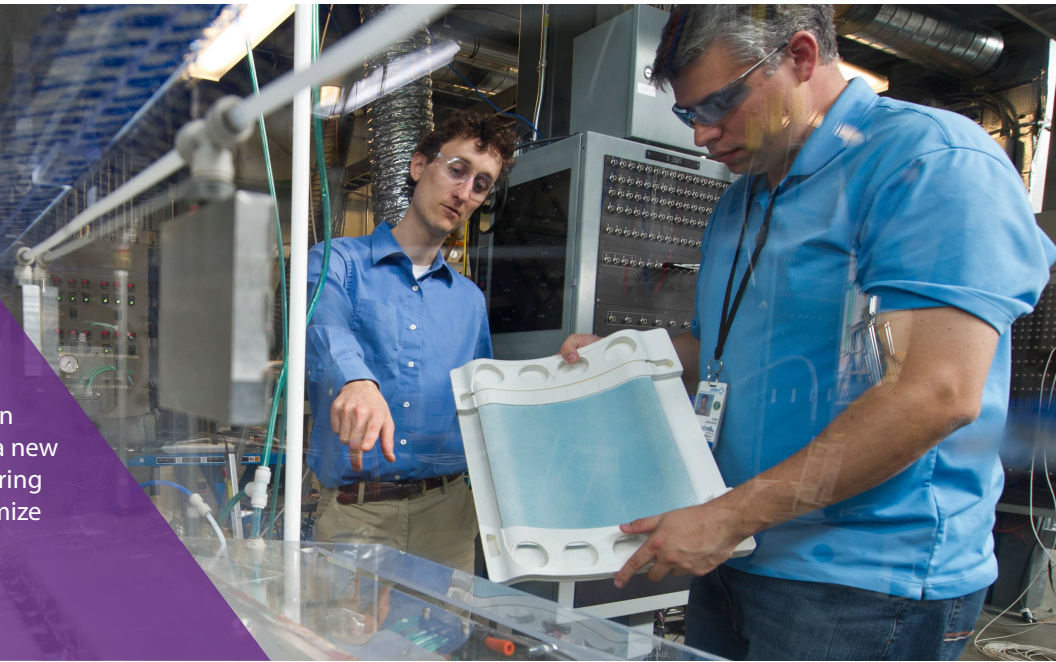




## SOLVING THE PROBLEM

The explosive growth of air conditioning across the globe represents one of the biggest climate challenges, with HVAC representing nearly 50 percent of total energy consumption in commercial buildings. 7AC Technologies offers a new approach to air conditioning technology, delivering extreme energy savings and the ability to maximize climate-friendly refrigerants.



## THE IMPACT:

7AC Technologies' single-step, liquid desiccant technology offers the efficiency improvements needed to manage the increased greenhouse gas emissions expected from the rapid growth of air conditioning. The company's liquid desiccant air conditioning system reduces typical HVAC electricity and water consumption by as much as 40 percent compared to existing best-in-class solutions. 7AC offers building operators and owners the opportunity to dramatically lower energy costs and protect real estate investments by correctly maintaining humidity levels.

## HOW IN<sup>2</sup> IS HELPING:

7AC Technologies is in need of research, development and reliability testing of components for existing and new applications. NREL will perform laboratory experiments to help 7AC improve their liquid desiccant heat exchanger design and accelerate their product's time to market. NREL will also model, help develop, and test product application solutions across a wide range of climate conditions, which will allow 7AC's OEM partners to increase production series and reduce costs significantly.

### TIER 1: Bench Scale

- Concept development stage
- Develop plans for prototyping & testing
- 3 – 5 years to market

### TIER 2: Prototype

- Available for testing & validation
- Plans for development of final product
- Less than 2 years to market

### TIER 3: Commercially Ready

- Models available in limited quantity
- Integrated demonstration
- Less than 18 months to market testing

## ABOUT THE IN<sup>2</sup> PROGRAM

IN<sup>2</sup> is a technology incubator that fosters and accelerates early stage technology companies that provide scalable solutions to reduce the energy impact of buildings. Through a \$30 million program funded by the Wells Fargo Foundation and co-administered by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL), sustainable building technologies are able to evolve and develop, contributing to the overall goal of a Smart and Connected Community that uses energy, water and other resources efficiently, reducing the negative impact on the environment.