

Q&A with AirGreen, Inc.: The Benefits of a Better, More Cost-Efficient Air Conditioner

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AirGreen Inc. in New Castle, DE has created a patented air conditioning and dehumidification system designed to provide superior comfort while also saving significant energy costs. We asked CEO John Hammond about how businesses can benefit from implementing the AirGreen technology.

What's wrong with conventional air conditioning systems?

While there is nothing essentially wrong with conventional air conditioning systems, the technologies have only incrementally improved over time, and there are certain environmental conditions they are ill-suited to handle. High humidity in conventional air conditioning systems often requires over-cooling to remove moisture and results in that cold-clammy uncomfortable feeling, along with using the additional energy to do that over-cooling.

The AirGreen system is among the most comfortable, healthiest, energy-efficient air conditioning systems. It reduces electric consumption by 50-60%; increases comfort with lower humidity; can run on renewable energy sources; eliminates dust, pollens, bacteria, and viruses; and ultimately saves money.

When compared to mechanical systems that overcool and reheat in order to control humidity, the AirGreen technology can save up to 60% in cooling season energy costs. And because it provides comfort with much



drier air, the actual A/C setpoint can be raised a few degrees with no loss in comfort. Finally, this proprietary liquid desiccant cooling system also scrubs the air of pathogens, allergens and microbes, improving air quality and reducing the chances of mold formation which can occur frequently when moisture and humidity is not controlled.

What are the specific markets where a product like Air Green would be most beneficial?

While most, if not all HVAC applications would benefit from the AirGreen technology from the point of view of saving energy both financially and environmentally, there are specific applications where the unique benefits of the AirGreen technology are special. Applications or process conditions that are humidity-, temperature-, or microorganism-sensitive are the sweet spot for the AirGreen technologies. Examples of such applications include grow houses, food processing, aerospace composites, hospitals and operating environments, schools, biotech research facilities, data centers, and a variety of other applications where humidity control is necessary or desirable.

The bottom line is that a considerable and growing amount of the cooling demand will be based upon the humidity load, which traditional mechanical cooling systems are ill-fitted to manage in a cost-effective manner. You can cool air to the dew point and condense the water vapor, and then re-heat, but that requires considerable energy.

Further, the liquid desiccant solution that AirGreen utilizes is effective in microbiological decontamination and works as a biocide to capture and neutralize a variety of airborne pathogens, including mold. For growers, this has been proven to be a compelling benefit.

Why is Delaware a good place to offer this technology and what kind of incentives are there for businesses who may want to install?

Like many states in the northeast, Delaware has a variety of incentives geared towards promoting the installation and use of energy-saving technologies. For example, the Delaware Sustainable Energy Utility, DSEU, has the ability to provide financing and other means to promote sustainable clean energy solutions. The Delaware Prosperity Partnership has fostered relationships geared towards helping entrepreneurial companies like ours succeed.

You might think places like Florida, Louisiana, and other southeastern states where it is routinely more humid than Delaware might be better suited for our technologies, but strangely, these states have little if any programs or organizations to provide incentives for such clean energy solutions. Delaware has worked hard to create a business atmosphere where start-ups can thrive and works in partnership with emerging companies where it makes financial sense to do so.

Learn more about AirGreen Inc. online at airgreeninc.com.

