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Data center gets highest green-building rating

Posted by [Martin LaMonica](#) [2 comments](#)

The answer to cooling ADC's data centers is blowing in the wind.

The company on Tuesday detailed the workings of what it says will be the first Platinum level LEED-certified data center hosting facility.

Rather than rely exclusively on air conditioners to push cold air from beneath computer racks, the building will pipe in outdoor air for cooling for most of the year.

The LEED (Leadership in Energy and Environmental Design) certification, done by the U.S. Green Building Council, rates buildings on a range of environmental factors, including energy and water usage, materials, and site location. The platinum rating is the highest rating given.

ADC (Advanced Data Centers) claims that its McClellan Park facility in Sacramento, Calif., will be 25-30 percent more energy efficient than the industry standard. The building is now under construction and is set to take tenants in the first quarter of next year.

It will achieve that efficiency not through esoteric computer technology but by architectural choices.

The data center will use outside air to cool its racks of computing gear for 75 percent of the year, which significantly decreases its cooling needs, said ADC President Micheal Cohen. Ducts and pipes will be laid to maximize flow and minimize turns that reduce efficiency.

But it is also looking ahead at emerging energy-efficiency techniques. Customers will have the option of using [water to cool their equipment](#), for example.

Planners are also keeping their eyes on direct-current wiring and equipment to lower electricity usage as well as fuel cells for on-site power generation, said Bob Seese, the company's chief data center architect.

ADC has structured its billing so customers pay a percentage of the cooling costs, which gives customers incentive to use energy-efficient technology like virtualization.

"A year ago, the board and investors made it very clear they felt that (green design) was the right direction for the corporation to take," Seese said. "And customers are demanding it right now."

Its Sacramento facility will also have a number of water-saving features, including the ability to capture nearly all its rainwater runoff for landscaping, its cooling towers, and bathroom fixtures.

Paints and sealants without volatile organic compounds will be used in the building, as well as porous and reflective materials to avoid absorbing heat.

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