

World's first wind-powered data center to be built in Texas

The world's first wind-powered data center will be built on Permanent School Fund lands in Dallam County, Texas, the state's General Land Office announced last Thursday (July 16).

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The project developer, Houston-based Baryonyx Corporation, also intends to build what could be the two biggest offshore wind projects in the US, on offshore tracts of submerged state land off Texas' Mustang and South Padre Islands. Once completed, the two wind farms will pay at least \$338 million as lease under a 30-year deal with the Permanent School Fund, benefiting Texas school children.

At least 750 megawatts are expected from each of the Mustang and South Padre projects. Turbines that generate up to five megawatts each will be used. Engineering and design of the projects are slated to begin this year.

After the 17th year of the lease and Baryonyx's payment of nominal fees and royalties, the General Land Office has the option to resell the electricity off the wind farms to schools, prisons, cities, or other public partners to earn additional money for the state's Permanent School Fund through the Land Office's State Power Program.

Meanwhile, a Tier-4 type of data center is being planned by Baryonyx. The said type is "the most secure type of data center designed to host mission critical computer systems with fully redundant subsystems and compartmentalized security zones controlled by biometric access". A data center, or server farm, is where governments and businesses store computer systems off-site in a secure area. Environmentally-sustainable data centers are being developed recently since back-up generators and security devices consume a lot of energy.

At least 1.5% of the global energy demand presently comes from the need to power servers for the Internet, Baryonyx Corporation CEO Ian Hatton said.