HARMONY
FLORIDA

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Harmony teams with FSU to find new ways to power community

Dual approach makes power when sun isn t out

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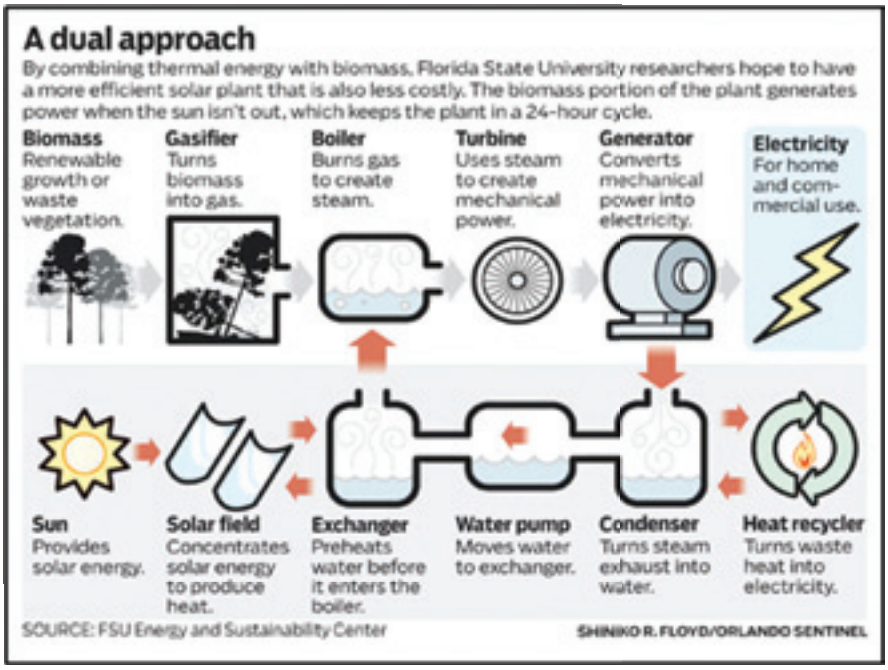

HARMONY -- Jim Lentz had been told many times that his pursuit to build a community that generates its own power is ludicrous.

But Lentz , founder of the environmentally friendly Harmony in eastern Osceola County, might get the last laugh. A recently forged partnership with Florida State University s Energy & Sustainability Center puts Lentz a step closer to his vision.

The university plans to build a 5-megawatt power plant that uses solar thermal energy combined with the gas created by burning biomass, or organic matter. That s enough to power an average of 2,000 homes. Construction is set to start in the fall and is expected to be completed in 18 months.

The project is part of the Florida Sustainable Energy Research Park at Harmony, an FSU program that hopes to attract renewable-energy companies to work with its researchers on developing and improving technology. The 11,000-acre Harmony community would be used for testing products.

The plant won t use conventional solar panels, which capture the sun s ultraviolet rays and convert them into electricity. Instead, it uses thermal aluminum panels that capture and store heat. The intent is to lower energy-production costs by using off-the-shelf aluminum sheets.

We want to bring the cost of this technology down, to make it environmentally intelligent, said Lentz, who began building Harmony six years ago. Companies and people are not going to buy into renewable energy unless the price is right.

The technology behind conventional solar panels is still not advanced enough to produce power cost-effectively. Federal incentives are making it more affordable now in the hope that increased demand will stimulate research into cheaper technology.

The Harmony plant, which will occupy 30 acres, will also use gas generated by burning biomass -- organic matter such as wood -- to make up for the hours of the day when the sun isn t out.

We ll start with slash pine, said Brent Greska, the FSU center s associate director. But we re not locked in on that. We want to experiment with nonedible crops, in essence fast-growing weeds that can be used for this purpose.

The plant will be run mostly by FSU doctoral candidates who would study at a satellite center the university will establish at Harmony.

A memorandum of understanding recently signed with Orlando Utilities Commission sets the foundation for the agency to buy and distribute the plant s power.

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Because electricity is traditionally used first in areas closest to the grid, Harmony, in effect, could be generating power for its 475 homes.

The community is only beginning to sprout. Hundreds of more homes, a hotel and a restaurant are in Lentz plans for Harmony.

I hope that eventually we can produce all the power the community needs, Lentz said. But we don t want that to be just it. We want to be copied. We want for other communities to do what we re doing.

Osceola County officials are betting on the Harmony-FSU project to attract others and are looking at tax incentives to that end.

Clean energy [companies] is a targeted industry we are going after, said Maria Grulich, Osceola s economic development director. We ve found out through experience that companies want to come to an area where there are already others like them.

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