

Image not found or type unknown

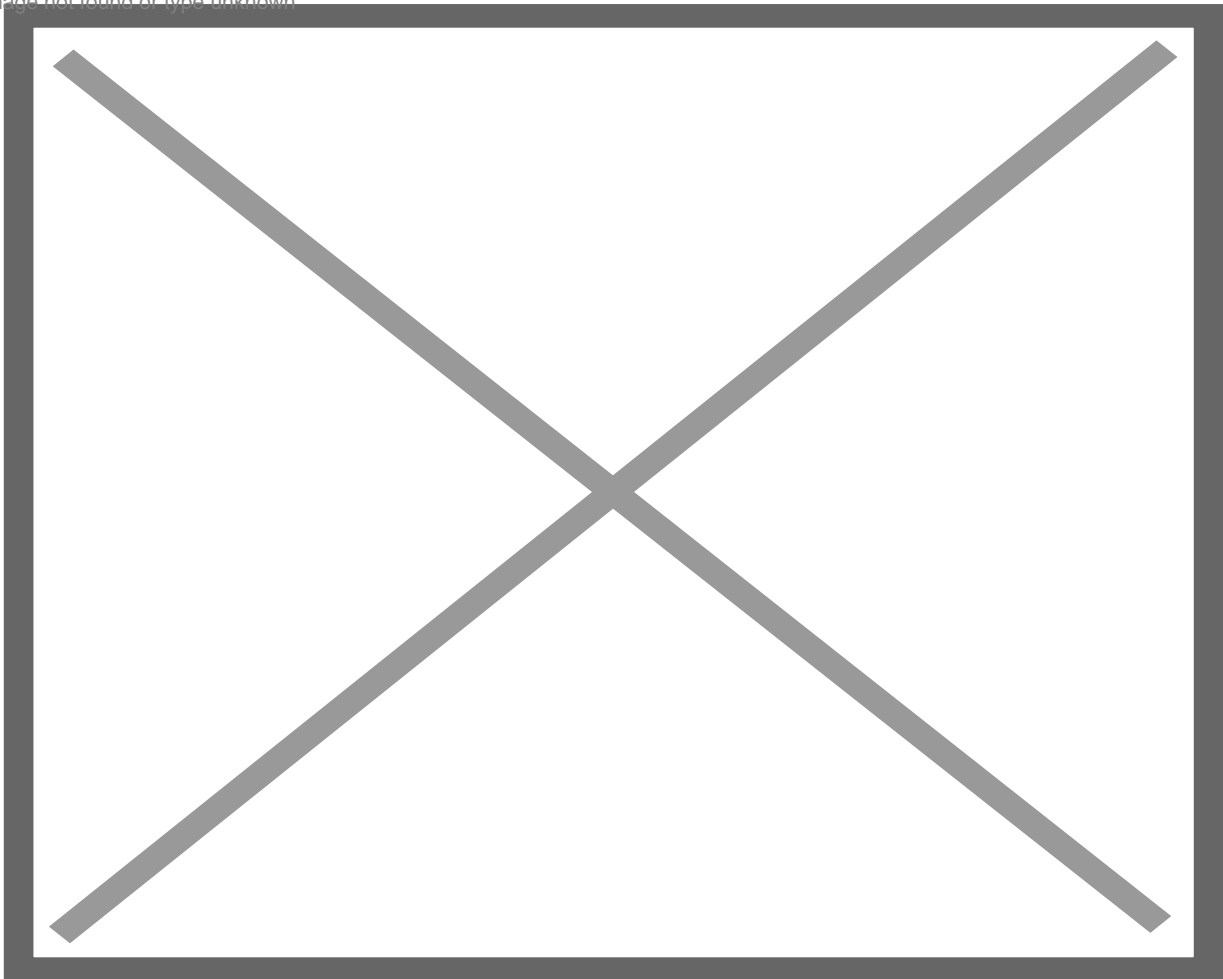
No Garbage: Waste-to-Energy Project Seeks to Transform St. John's Environmental Landscape

The pilot project plans to convert local waste into clean energy, enhancing sustainability on the island

Board Meetings / **Published On June 12, 2024 06:16 AM /**

Janeke Simon **June 12, 2024**

Image not found or type unknown



On Tuesday, during the Public Services Commission's monthly meeting, a proposal from Advanced Sustainable Technologies Limited to construct a waste-to-energy plant on St. John was once again before commissioners.

AST Cleantech, as the company calls itself, has been proposing the build as a pilot project for some time now. In re-introducing the matter to the PSC, AST attorney Boyd Sprehn noted that the plan is to "produce a little under one megawatt of electricity as a baseload unit while taking care of virtually all of the waste generated on St. John." Before construction of the plant can move forward, however, agreements must be secured from both the V.I. Waste Management Authority

and the V.I. Water and Power Authority.

AST Group CEO Dan Levin said that final design plans for the waste-to-energy plant were almost completed, and that the company had secured the financial backing of a U.S. bank for the full capital expenditure needed for the project. Engineering partners had already been secured, as was land in Florida that will be used to fabricate, construct and test the unit before it is shipped to the Virgin Islands. “We expect that in the coming months, we’ll start the actual construction and fabrication of the unit,” Mr. Levin anticipated. Within 10 months, the unit is expected to be ready to be fired up in Florida, followed by another two months’ worth of testing. “Overall, the system should be at the St. John transfer station in roughly 12 to 13 months,” Mr. Levin projected. “Startup should happen by the end of 2025. Before the end of the year,” he estimated. He told commissioners that he expected the unit to cost roughly \$10 million to install.

Responding to a question from PSC Commissioner David Hughes, Mr. Levin said that the waste-to-energy unit produces no residual waste from the process – the only outputs are electricity and “an inorganic crystal that is utilized as a product as well.” Gasses produced by the waste decomposition process are reportedly cleaned and fed into the gas turbine for power generation. This fuel, Mr. Levin claimed, “is significantly cleaner than natural gas and other types of fuels that they use in gas turbines.” The expected emissions from the waste-to-fuel operation would be “between undetected to roughly 10 to 100 times less than the cleanest natural gas power station,” he declared. Because the system is closed end-to-end, vacuum pumped and sealed, any concerns about odor are unwarranted, Mr. Levin assured commissioners.

“Also...we try to mitigate the noise...it will be almost undetectable,” he continued. He noted, in response to concerns expressed by Commissioner Laura Nichols-Samms that AST units are currently operating in Seattle, Washington, as well as in the Czech Republic and Germany, where environmental requirements are more stringent than those in the United States.

Mr. Hughes noted that the success of the project would require AST to interface with both VIWMA and WAPA. However, “neither of them is likely to be particularly responsive right now – they’ve got a lot of issues” to deal with, Mr. Hughes acknowledged. However, Mr. Levin informed the PSC that his company had already received a draft power purchase agreement from WAPA, which is expected to be signed within the next few weeks. Although the agreement with the WMA should be easier, because no tipping fees would be required, that process had not yet been completed. “If you can help us moving that forward, obviously we’d love any help,” Mr. Levin appealed to commissioners.

“If you’re not looking for money from Waste Management, I’m pretty sure they’d be happy to give you trash,” Mr. Hughes quipped. He encouraged AST to continue to work closely with the PSC’s general counsel and executive director on any draft agreements with the regulated utilities, “so that we can monitor and offer our comments throughout the process.”

The goal, said Mr. Hughes, is to be prepared so that “when it gets ready to do something, we’re already full in agreement with that.” Following quick calculations on the production capacity of the unit, Mr. Levin said that the PSC can expect to see a power purchase agreement of about 10 gigawatts per year. “That’s the maximum we expect,” he noted.