TOWN GREEN November 2025

At the May 3, 2025 Annual Town Meeting, Truro voters overwhelmingly approved installing a solar field at the Town landfill and authorized the appropriation of \$5 million to fund "engineering services, construction, decarbonization, and project management related to solar electricity facilities on Town property." The timing of the vote opened up a potential 40% savings on installation costs through successful application for a federal Investment Tax Credit (ITC). Voters were clearly endorsing this significant step in Truro's commitment to clean energy and elimination of fossil fuel use by 2050 as demonstrated by the 2024 Truro Municipal Decarbonization Roadmap and Truro's designation as a Green Communities Climate Leader. ¹

At their October 28 meeting, the Select Board was poised to approve and sign a contract with Solect Energy for the solar field installation at the landfill. To meet the requirements for the ITC, that contract must be signed and initial payment of about 7% must be made before the end of this year, when the tax credit disappears. Following the signing of the Letter of Intent (LOI) in September, Town counsel, Rick Holland from KP Law, has been working with Solect Energy to refine the details of the contract, making sure that the Town is properly protected.

At the Select Board meeting, Town Manager Kelly Clark highlighted terms of the contract such as the initial payment for the solar panels, which will ensure eligibility for the ITC.² Select Board members asked questions about the price tag for storage and installation of the solar panels, the production and performance warranty for kilowatt-hour production, and obtaining the Department of Environmental Protection (DEP) permit.

Beyond these questions, member John Dundas expressed concern about the recent discovery of PFAS at the landfill and the possibility that building a solar array there might "disturb the soil" and pollute groundwater flowing from the landfill. The Select Board decided to postpone the vote until their next meeting, when they would discuss answers to their questions and further information from Town Staff and Solect Energy.

To facilitate approval of the contract at the upcoming November 12 Select Board meeting, the Truro Energy Committee (TEC) is continuing its outstanding work by producing two documents explaining the importance and environmental safety of the landfill solar array. A brief summary document, "Landfill Solar: Clean Energy from Closed Landfills," makes the key point that "modern solar arrays can now sit safely atop closed landfills using sled-mounted or ballasted systems — designs that rest on the surface without penetrating the protective landfill cap." These systems mean "zero disturbance to the landfill's gas and drainage systems."

The Energy Committee also produced "Landfill Solar Project—Questions and Answers," covering contract terms, decision factors, risks, and contingencies, and environmental issues. Regarding contract specifics, for example, the TEC document addresses questions about the current \$4,552,164.73 cost by explaining that it now includes Eversource Pre-Application fees to

¹ At the December 17, 2024 meeting, the Select Board approved Item 7E, the <u>Truro Municipal Decarbonization</u> Roadmap. On May 2, 2025, the Massachusetts Department of Energy Resources designated Truro as a <u>Climate</u> Leader Community.

² The distributed version of the <u>Purchase and Installation Agreement</u> appears on pages 63-89 of the October 28, 2025 Select Board agenda packet.

be paid by the Town. More, "[t]hese pass-through costs will change again once Solect receives the final quote with the Interconnection Service Agreement."

Also related to cost, Solect guarantees that during the first year, the solar array will produce at least 1.44 million kWh, and if it doesn't, Solect will compensate the Town at the rate of 18 cents per kWh. It's also important to remember that by approving the contract now, the Select Board ensures that taxpayers will benefit from a 40% tax credit, reducing the project cost by \$1.8 million, down to about \$2.8 million.

Addressing decision factors, the TEC document lists the eleven Cape towns that have already built solar arrays on their closed landfills; none reports problems with PFAS or environmental issues. And DEP has issued permits for solar fields on closed landfills to another <a href="https://linear.com/115/massachusetts.com/115/massac

In the highly unlikely event that DEP does not issue a permit, the TEC document summarizes the Town's contractual protections: "The contract explicitly requires Solect to obtain the DEP post-closure permit, limits the Town's cost exposure to a small pre-approval amount, and allows the Town to terminate—owing only early development costs—if DEP denies or fails to issue the permit. That exposure can be mitigated significantly in the unlikely event that it occurs." Specifically, the Town would have bought and would own the solar panels, and that asset could be redirected to future planned solar projects, such as one at the DPW on Town Hall Hill, or to improving the resilience of the Community Center and/or the School. The panels could also be sold to a solar project elsewhere.

On the environmental front, the TEC document addresses questions about PFAS contamination.³ The Town is actively monitoring PFAS at the landfill after the 2023 discovery of PFAS in monitoring wells, which was reported immediately to DEP, and groundwater flow analysis is ongoing. At the Select Board meeting, Mr. Cabral noted that "We think that the source of the PFAS coming from the transfer station is in the direct east corner of the landfill. So at the back of the landfill where there used to be septage pits decades ago...and that is under the liner."

Addressing concerns about PFAS on the solar panels, the TEC document makes two key points. First, the contract requires Solect to provide the Town with the manufacturer's certification that the solar panels are free of PFAS, and they have already done so. Second, the Town has the contractual right to test the panels upon delivery. As Mr. Cabral said, "testing them wouldn't be a heavy lift anyway for us to do as part of our monitoring program when they arrived." Also reassuring is the point made on the DEP Fact Sheet, Q&A for Public Water Suppliers on PFAS Regulations: "We have not identified any water sampling results that have detected PFAS coming off solar panels or that PFAS is present on panels."

³ For detailed information about PFAS, the "forever chemicals," see Dan Gaffney, SafeWell Corporation, "A guide for protecting your family's health" on Truro Health Department <u>PFAS Information</u> and the <u>Mass DEP Fact Sheet on PFAS in drinking water</u>.

Finally, the TEC document quantifies the huge environmental benefit of installing this solar array. Reduction in carbon dioxide emissions in the first year alone would amount to 680 tons of CO2; over 25 years, that amounts to a 15,900-ton reduction. Remarkably for the future, "[t]he landfill solar farm produces approximately enough electricity to power all of the Town's assets (buildings and vehicles) if they were fully electrified... So Truro's overall environmental contribution from the landfill solar farm will be roughly equivalent to all the CO2 our municipality produces today." As climate science continues to show, carbon dioxide is a greenhouse gas that traps heat in the atmosphere, contributing to global warming and climate change. And as a 2018 study shows, cumulative CO2 emissions affect sea-level rise over time, and so controlling CO2 emissions is a particularly smart long-term commitment for a coastal town concerned about flooding and the threat of salt-water intrusion into groundwater.

At their October 28 meeting, three Select Board members acknowledged that voters overwhelmingly supported installing a solar array at the landfill. In every respect—voter accountability, financial responsibility, and environmental protection of air and water—signing the contract for installation of a solar field at the Truro landfill is a giant step forward for Truro, the only Climate Leader Community on Cape Cod.

-Elaine Beilin

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⁴ See Sarah Fecht, Columbia Climate School, How Exactly Does Carbon Dioxide Cause Global Warming?

⁵ See Study: Reducing carbon emissions will limit sea-level rise.