

## CONTACTS:

Kristen Pennucci, MassDOT (Email: [Kristen.Pennucci@dot.state.ma.us](mailto:Kristen.Pennucci@dot.state.ma.us))  
Mohammed Siddiqui, Ko-Solar (Phone: 508-654-8044 – Email: [contact@ko-solar.com](mailto:contact@ko-solar.com))  
Matt Shortsleeve, Solect Energy (Email: [mshortsleeve@solect.com](mailto:mshortsleeve@solect.com))

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### **MassDOT signs a “Letter of Intent” to build a first-of-its-kind Highway Solar Photovoltaic Noise Barrier (PVNB) project in Lexington, Massachusetts.**

**Boston, Massachusetts** – The Massachusetts Department of Transportation (MassDOT) (<https://www.mass.gov/orgs/massachusetts-department-of-transportation>) is launching a groundbreaking solar technology that may change how citizens look at U.S. highways, railways, and other transportation facilities. This highway solar noise barrier project will be the first of its kind in the Western Hemisphere.

In 2015, Ko-Solar ([www.ko-solar.com](http://www.ko-solar.com)) and its partners approached MassDOT to discuss the concept of PVNBs. After comprehensive coordination and conceptual design work, MassDOT has agreed to this pilot PVNB project along Interstate 95 in Lexington, Massachusetts. The project involves retrofitting an existing noise barrier on Route 128 into a PVNB that will be built and financed in partnership with Solect Energy ([www.solect.com](http://www.solect.com)), a Massachusetts-based solar energy powerhouse. MassDOT will leverage its membership in PowerOptions ([www.poweroptions.org](http://www.poweroptions.org)), the largest energy-buying consortium in New England for the procurement and contracting of the project. Solect Energy will finance, install, monitor, and maintain the project. MassDOT plans to use the results of the pilot, including information about noise impacts, maintenance, cost, and community perception, to determine the feasibility of PVNB applications elsewhere in the Commonwealth. Progress on the project suffered some delays in part because of changing Massachusetts Solar Development Incentive Programs; SREC to SMART.

MassDOT vetted about two dozen potential sites for the PVNB pilot with Ko-Solar’s propriety selection process, ultimately choosing the Lexington location. The selection of noise barrier, which is on the north side of the highway, is 3,000 feet (~915 m – double the size of the Empire States building or three times of the Prudential building in Boston) long, 20 (~6 m) feet tall, and is constructed of reinforced concrete. The retrofit PV system capacity is expected to be 637.5 kW DC, and 802,000 kWh will be generated annually. This represents the equivalent of supplying 120 homes per year with electricity and will avoid roughly 1.4MM tons of CO2 emissions.

In partnership with Ko-Solar and its partners, MassDOT solicited input on the project from abutters and other Lexington residents through letters to those living near the project site, a public meeting, and meetings with other stakeholders, such as Sustainable Lexington, a local advocacy group (<https://www.lexingtonma.gov/sustainable-lexington-committee>). Stakeholders raised concerns including potential changes to noise levels on both sides of the highway. Ko-Solar and its partners responded to all questions and at the conclusion of the public meeting, MassDOT held a referendum for abutters to vote on the pilot project. 100% of the abutters in support were required to advance the project. All votes were in support of the pilot project. An outcome of the public input process was to require that noise level monitoring would be part of the pilot program to understand whether, if at all, the PVNB affects the noise levels that abutters perceive or that occur on the other side of the highway. Desktop noise modeling that has been completed suggests there may be a slight improvement/reduction in noise levels for the abutters. Ko-Solar partnered with Ramboll ([www.ramboll.com](http://www.ramboll.com)), leading global engineering, architecture, and consultancy company, to accurately simulate the noise levels and to monitor them following construction.

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At **MassDOT**, transportation is not just about roads, bridges, trains, and buses. Its mission is to deliver excellent customer service to people traveling in the Commonwealth by providing transportation infrastructure which is safe, reliable, robust and resilient. MassDOT works to provide a transportation system which can strengthen the state's economy and improve the quality of life for all. The Department supports the economic, quality of life, and environmental goals of the Commonwealth. For more information, on MassDOT's Renewable Energy Projects, please visit: [MassDOT Renewable Energy Projects | Mass.gov](#).



**Ko-Solar** is the leader in full-service transportation-based solar energy systems providing custom design, financing, installation, and monitoring to various private and government entities for highways, railways, bridges, parking areas, ports, and transportation facilities. Ko-Solar brings innovative, smart, clean transportation-based solar technology solutions such as solar sound barriers, canopies, retaining walls, etc. Furthermore, Ko-Solar combines solar technology and highway/rail noise barrier structures, harnessing solar energy, reducing noise pollution and carbon from the atmosphere while generating funds for local and state agencies. Ko-Solar's visually pleasing solar noise (sound) barrier systems are designed for simplicity, scalability, enhancing reliability and applicability at sites. Learn more at: [www.ko-solar.com](http://www.ko-solar.com)



**Solect Energy** develops, installs, finances, and provides technical and energy market services for solar and energy storage projects. Solect Energy has installed over 600 projects exceeding 120MWs of solar capacity with public, non-profit and commercial clients, site owners and off-takers. For more information, please visit: [www.solect.com](http://www.solect.com)



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