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**Welcome to the Tortoise QuickTake podcast. Thank you for joining us. Today, Tortoise provides a timely update on trending topics in the market.**

Hi, this is Jerry Polacek, I'm a Managing Director and Group Lead for Tortoise's Sustainable Infrastructure segment. Today, we'll review two recently proposed bills in Congress that seek to accelerate the growth of U.S. renewable energy. While much has been written about the Democratic party's proposed [Green New Deal](#), two recent bills offer insights into alternative approaches to accelerate national adoption of carbon free, renewable energy. The two proposals include extending the existing 30% investment tax credit, which principally benefits solar, and introducing a national renewable energy standard, with potential to boost a cross section of the renewable energy industry.

Let's start off with a brief summary of the solar investment tax credit or ITC, which is an existing federal tax incentive that benefits U.S. solar. The ITC provides qualifying solar projects with the ability to receive a federal tax credit equal to 30% of its installed cost. The ITC was introduced in 2005 and has been extended four times. Presently, the ITC is set to begin a phased reduction to 26% in 2020, 22% in 2021 and end up in 2022 at 10% for commercial and utility scale solar and 0% for residential solar installations. There also exists opportunities for commercial and utility scale solar projects to secure the full 30% ITC through 2023 based on complying with Safe Harbor guidelines from the Internal Revenue Service.

This July, the House and Senate introduced twin bills to extend the 30% solar ITC through 2024. Interestingly, the House bill, known as the Renewable Energy Extension Act of 2019, was introduced by three representatives, including two Republican Congressman. The Senate version was introduced with support from 15 Senate Democrats but is presently lacking Republican support.

This legislation provides an identical multi-year step down of the ITC as currently exists, but pushes out the start of the phase to 2025. The ITC extension bill has strong support from the solar industry, which cites its expected positive impact on jobs, the economy and greenhouse gas emissions. Incidentally, the industry has been anticipating the multi-year phase-down of the ITC and many industry participants believe that utility scale and commercial solar can compete without substantial tax credits and the associated complexity the tax structure presents in financing projects today.

Let's move on now to discuss the Renewable Energy Standard Act of 2019, which was introduced in late June by a group of Senate Democrats. This bill, the first of its kind, would require all 50 states to source increasing levels of renewable energy, beginning in 2020. It has increasing annual targets and seeks to reach 50% renewable energy nationwide by 2035. You should note that 29 states already have state level renewable portfolio standards of varying degrees. However, only 11 states have standards that meet the ambitious 2035 federal targets and would be eligible to opt-out of the plan.

This Federal bill seeks to promote industry competition and attract diverse renewable energy resources whose relative economics vary by location. It does this by having various renewable energy technologies qualify for the program including wind, solar, biomass, incremental hydroelectric, geothermal energy, landfill gas, ocean, tidal and hydrokinetic energy. Absent from eligible renewable energy sources under the bill are new hydroelectric and wood-to-energy biomass projects. Also, most existing renewables would not be eligible and so the bill promotes development of new, low cost clean energy projects. According to the Union of Concerned Scientists analysis cited in the fact sheet, this plan would promote \$359 billion of new capital investment and reduce carbon emissions by 46% in 2035.

If the national renewable energy standard becomes law, it would principally impact retail electric suppliers, such as utilities, who would meet this requirement through buying or exchanging federal renewable energy credits. We believe utilities would seek to access renewable energy credits through entering into long-term power purchase agreements, or PPAs, directly with renewable energy projects. By selling green power to creditworthy utilities under long-term, fixed price PPAs, renewable energy projects benefit from stable revenue, which is highly valued by project investors. Under this plan, we would expect the presence

of long-term utility PPAs would attract efficiently-priced private capital and contribute to the long-term growth of the U.S. renewable energy industry.

Given a divided Congress and an upcoming Presidential election in 2020, the chances of either of these plans becoming law this year is uncertain. We'll look to a potential tax-extenders bill being negotiated in Congress later this year as the most likely opportunity for inclusion of the solar ITC extension. Notwithstanding that these bills would provide a catalyst for industry growth, we believe U.S. solar and wind are at an inflection point and will see sustained growth driven by competitive, unsubsidized economics relative to fossil fuel power and a strong demand pull from consumers who increasingly prefer sustainable energy sources.

On behalf of Tortoise, I want to thank you for joining us and hope that you found this podcast useful in understanding the dynamic developments occurring across the energy value chain. Thank you.

**Thank you for joining us. And stay tuned for our next cast. Have topics you want covered or other feedback to share? Write us at [info@tortoiseadvisors.com](mailto:info@tortoiseadvisors.com).**

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