

Increasing the Quality of Decarbonization Investments

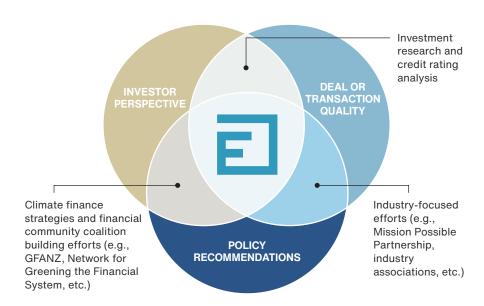


The Energy Futures Finance Forum (EF<sup>3</sup>) will analyze the barriers to large, private capital flows to decarbonization opportunities and provide actionable policy recommendations in response.

The EF³ analytical approach examines investment roadblocks from two perspectives: an industry value chain perspective and a crosscutting perspective focused on barriers common to multiple industries.



**Differentiation** — EF<sup>3</sup> sits at the intersection of policy, deal quality, and the investor perspective.



Successfully implementing and achieving the global clean energy transition is often considered to be primarily a technology challenge, with the key focus being the discovery of new means of making and using energy without greenhouse gas (GHG) emissions.

Less understood is the massive investment and capital markets challenge of raising the finances needed to deploy well-proven, cheap, and serviceable decarbonization assets.

Improving the investment quality of decarbonization value chains will help industry players access the largest pools of private capital — global, publicly traded debt and equity markets — which are of the same order of magnitude as the expenditures needed to achieve net-zero by mid-century.

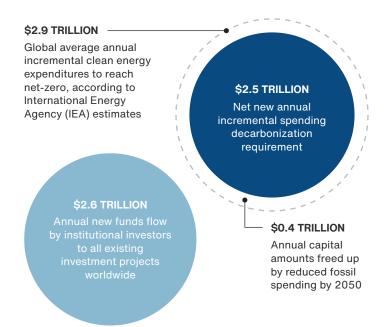
## EF<sup>3</sup> offers policy recommendations

reflecting an investor's perspective that decarbonization investments must be blue chip.





A major obstacle to decarbonization is finding the several trillion dollars per year of financial capital required to pay for deploying new clean technologies globally, in addition to their upstream supply chains and downstream infrastructure.



This is an immense challenge because financing is needed for both new clean investment and the ongoing essential maintenance on upstream and downstream legacy energy systems until they are no longer needed for global energy system reliability and resilience.

Globally, there is a need for an incremental clean energy expenditure of \$2.9 trillion/year compared to the baseline until 2050. Comparable U.S. net incremental expenditures are forecast to be \$200 billion to \$300 billion/year.

These values are of the same scale as all of the existing project and nonfinancial corporate net fixed investment in all economic sectors. The implication is that if the decarbonization capital requirement were to be entirely accommodated without displacing other investments, new savings flows to institutional investors could need to double. Therefore increasing investment quality is necessary to attract and mobilize the needed financial resources.

**Ready to learn more?** Led by Ernest J. Moniz, the 13th U.S. Secretary of Energy, the EF<sup>3</sup> team brings experience and expertise across the energy landscape, including energy finance and project development, macroeconomics, strategic management, policy, regulation, and technology.



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The program leverages and expands upon the research capabilities, convening power, and credibility of the **Energy Futures Initiative (EFI)** infrastructure.