

# Bond Case Briefs

Municipal Finance Law Since 1971

---

## S&P Sustainability Insights: Why Planning For A 2.3°C Warmer World Is Critical This Decade And Next

### Key Takeaways

– **Using probabilistic analysis, we estimate a 90% likelihood that, by 2040, the average global temperature will exceed the Paris Agreement's goal of 1.5° Celsius (1.5 C) above pre-industrial levels.** And there is a 50% likelihood of it exceeding 2.3 C. This suggests that—as a baseline—all sectors, including households, may want to prepare for the impacts of physical climate risks associated with a 2.3 C world.

– **If we're not ready, there's a 50% chance that economic costs from global warming would accumulate to 9%-33% by 2040.** This is our finding after integrating the potential economic impacts of climate change into our probabilistic model. In a more extreme case (90th percentile), the average temperature could be 2.8 C higher than preindustrial levels by that time.

– **Yet, globally, climate adaptation and resilience needs remain largely unmet.** We believe this is due, in part, to uncertainties and data gaps associated with climate risk modelling, long and costly implementation of adaptation and resilience investments, and greater societal benefits than private benefits, all of which could put such investments on the back burner.

– **We believe our probabilistic model supports the assessment of physical climate risks, as well as adaptation and resilience planning, by adding likelihoods to risk portrayed in existing scenario analysis.** Our model translates uncertainty regarding energy transition pathways and their impacts on climate change into risk distribution, and provides a simpler way to gauge adaptation needs and potential related losses.

[Continue reading.](#)

15-Sep-2025 | 07:13 EDT

Copyright © 2026 Bond Case Briefs | [bondcasebriefs.com](http://bondcasebriefs.com)