



Performance Insurance Solutions for Breakthrough Technologies

Mitigating and reversing climate change is arguably the greatest opportunity for innovation ever seen by humanity. Technology developers and their partners are stepping up to this enormous challenge with creative solutions that are both impactful and commercially viable. While new technology comes with risks, risk cannot stop us from creating a better future.

New Energy Risk (“NER”), a California-based majority-owned indirect subsidiary of AXA XL, a division of AXA SA, works with diverse and global clients to support technology breakthroughs solving global challenges, including in energy, pollution, and decarbonization. Its team of scientists and insurance professionals utilize NER’s proprietary, technoeconomic modelling to evaluate novel risks. The company partners with start-ups, developers, lenders, investors, re/insurers, and brokers to structure customised performance insurance solutions.

NER’s performance insurance solutions seek to mitigate technology risk for clients—and their customers and lenders as a result—by transferring specific and carefully calibrated technology and financial risks to the insurance markets. As a result, NER brings a new class of diversified risk to the insurance market that addresses major environmental issues. To date, NER clients are supported by \$USD1 billion in total insurance capacity. With its proven platform, NER adapts to emerging sectors by designing bespoke insurance solutions for commissioning, operating output, revenue swaps, business interruption, and warranty or feedstock backstops. Industries of focus include fuel cells, energy storage, energy efficiency, waste-to-value (e.g. biogas and biofuel production), and carbon capture.

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By Tom Dickson, CEO of New Energy Risk

NER clients include:

- Fulcrum BioEnergy, a trash-to-biofuel developer;
- Bloom Energy, the leading supplier of solid-oxide fuel cells; and
- Brightmark, a plastic waste-to-product technology company.

With well-structured packages, NER clients gain access to otherwise inaccessible financing. By enabling capital efficiency, new technologies advance more quickly from development to deployment and commercial scale with widespread customer adoption. In five years, NER clients have unlocked over \$USD 2 billion in capital for their technologies.

NER client impact includes:

- **Waste processing: 449K tons/year** (The amount of trash produced each year by 545,565 US residents.)
Reducing landfills and building a circular economy, NER clients convert trash into valuable products like transportation fuels and specialty waxes.
- **Clean energy generation: 695K MWh/year** (The amount of power used per year by 63,343 US homes.)
Reducing dependence on aging centralized power grids, NER clients provide reliable, cleaner power.
- **Alternative fuel production: 50M Gal/Year** (The amount of fuel used per year by 88,809 US drivers.)
Reducing transportation's dependence on petroleum, NER clients produce better fuels by circulating waste back into the value chain as a solution for overflowing landfills.
- **CO2e Avoidance: 320K tons/year** (The amount from flying roundtrip, New York City to San Francisco, by 491,665 passengers.)
By preventing harmful greenhouse gas emissions, NER clients are displacing carbon dioxide and its equivalents to slow down our worsening climate crisis.

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NER-developed policies are underwritten and issued by one of the affiliated insurance companies of AXA XL and administered by its subsidiary Complex Risk and Insurance Associates, LLC, licensed in California (#0124307). Learn more about New Energy Risk at www.NewEnergyRisk.com

About the Author

Tom Dickson, CEO of New Energy Risk since 2015, has more than 35 years of experience in the insurance and reinsurance industry; including senior executive and underwriting leadership positions in the US, Europe, and Asia; notably as the former CEO and Chief Underwriting Officer of the Centre Group, a \$10B reinsurer that pioneered innovative products to address high-value business risks and financing. Tom has also served on the boards of public and private companies, including Flagstone Re, Paragon Insurance Services, Reformation Insurance Services, and as an advisor to Cellcontrol. Tom graduated with honors from Stanford University and holds a Master's degree from John Hopkins University (SAIS).

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