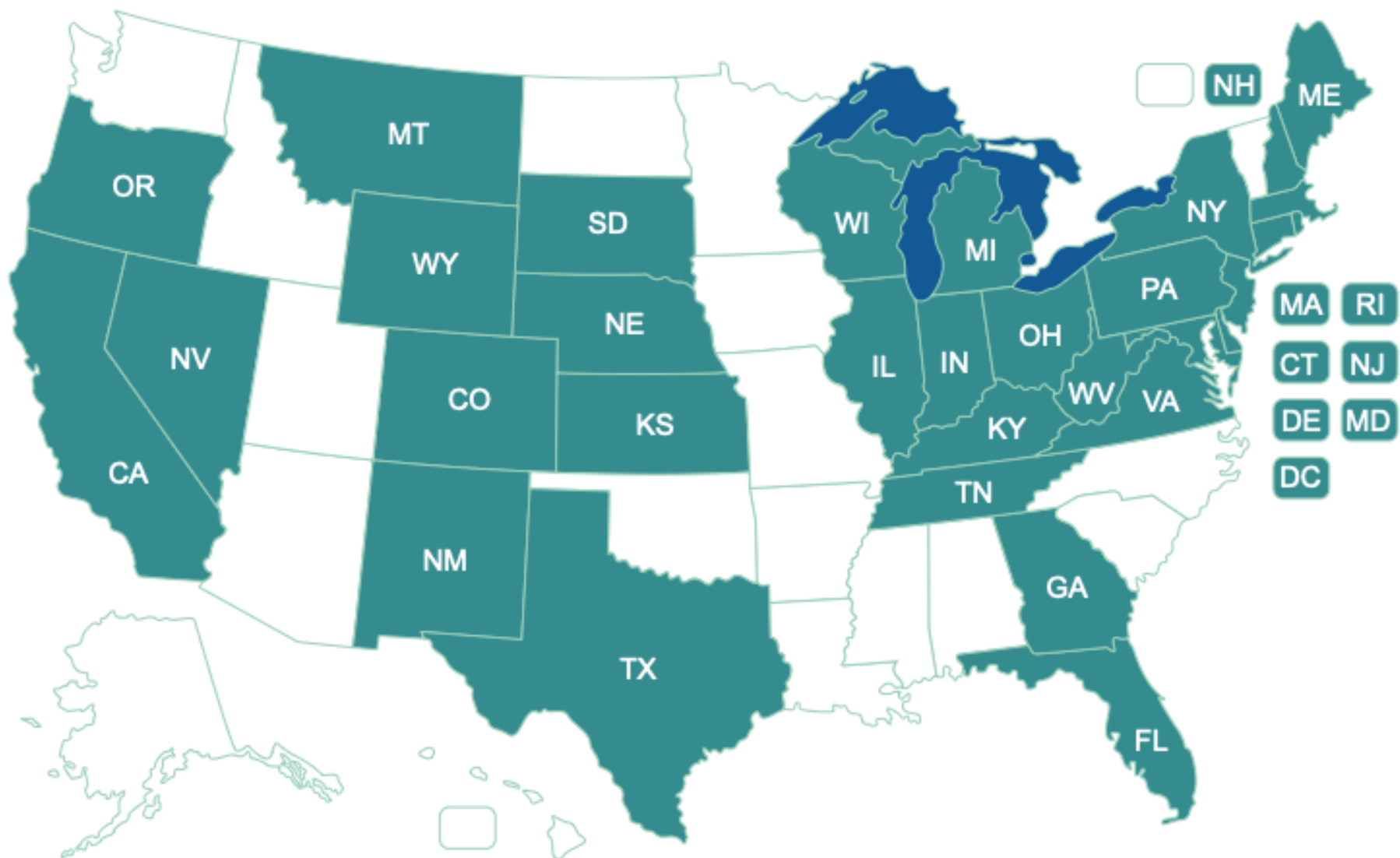




Immagine: Terminale Bloomberg

La difficoltà a finanziare gli impianti nucleari di vecchia e nuova generazione negli stati U.S.A. che hanno mercati deregolamentati dell'elettricità

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Stati U.S.A. con mercati deregolamentati dell'energia

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Can nuclear power be financed within deregulated electricity markets?

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Abstract

Purpose – Nuclear power is being promoted by a segment of the environmental community as an acceptable energy source to fight man-made climate change because it does not emit greenhouse gases. Missing in the literature is a discussion and analysis of the impact of electricity deregulation on the ability of nuclear power to obtain the requisite debt and equity financing within deregulated electricity markets, and in turn, on the potential number of new nuclear power plants that could help fight global warming. The purpose of this paper is to provide timely and salient policy guidance for the efficient allocation of resources to reduce greenhouse gases based on a new model linking debt and equity financing with a change in power plant revenue risk.

Design/methodology/approach – A theoretical model is put forth that links the availability of debt and equity financing to the change in revenue risk created by electricity deregulation and then tests this model by performing a qualitative phenomenological analysis.

Findings – The analysis supports a conclusion that electricity deregulation has a negative effect on the ability to attract nuclear plant debt and equity financing. As such, nuclear power may not be a viable option to reduce greenhouse gases within deregulated markets.

Originality/value – This paper fills certain gaps in the literature by creating a theory-based model that links debt and equity financing with a change in power plant revenue risk, performing a qualitative phenomenological