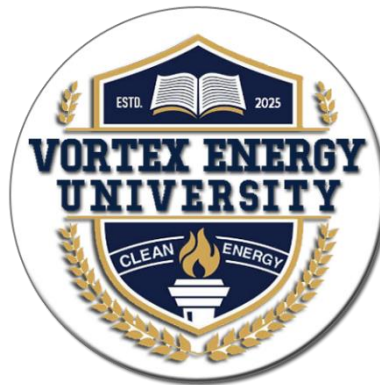




LIBRARY OF BINDERS, BOOKLETS, & DOCUMENTS – PUERTO RICO

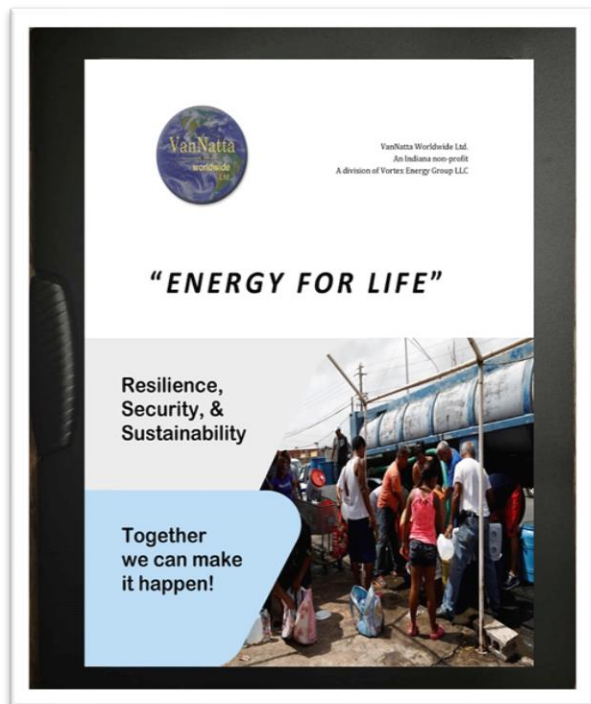
LIBRARY OF BOOKLETS & DOCUMENTS – ENERGY PRINCIPLES

LIBRARY OF BOOKLETS & DOCUMENTS – CLIMATE CHANGE

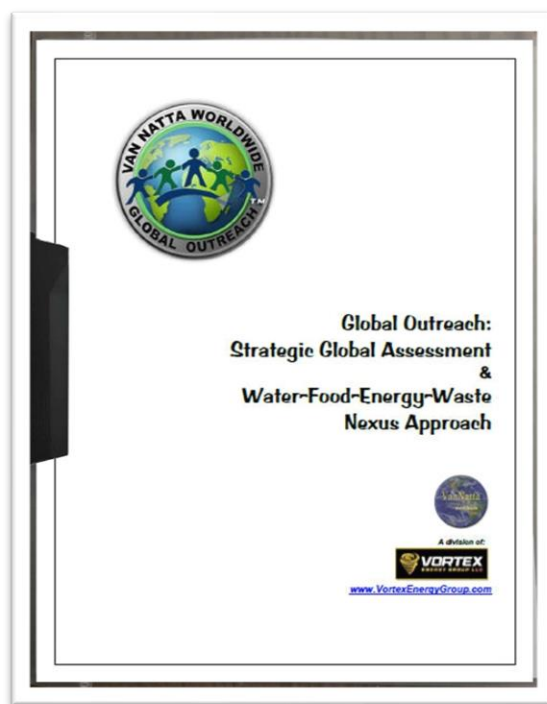
Vortex Energy Group LLC
November 2025

Complete Library of Binders and Supporting Documents

Below are the primary binders, along with supporting documents related to the projects in Puerto Rico to handle the 3 major crises: 1) Aging and deteriorated power grid system causing extreme levels of energy insecurity; 2) Sargassum invasion creating health and financial issues; 3) The ongoing garbage and landfill crisis that has plagued the island Commonwealth for decades. With a single solution, we are prepared to deploy an efficient and innovative waste-to-energy (WtE) system that will solve not only these three crises, but will further add to the jobs market and other sustainable financial benefits.



[Fundraising Proposal PR binder](#)
[\(doublesided print\)](#)



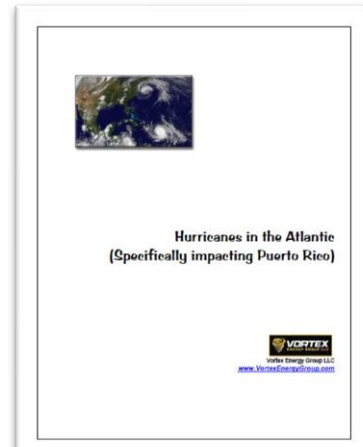
[VanNatta Worldwide Global Outreach binder](#)



[Emergency Management –
Effective Planning for
Hurricane Damage Response](#)



[Sargassum in the Atlantic –
Records and Forecasts](#)



[Hurricanes in the Atlantic
Specifically Impacting Puerto Rico](#)



Demographics and Medical Needs
Power Dependence /
Medical Preparedness Checklist
Puerto Rico Government and Key
Organizations Contacts



[Demographics - Checklists –
Contacts](#)



In-depth Research:
Power Outages, Costs, Impacts,
& Comparisons – Repair or Replace?



[Power Outages in PR Costs
Impacts and Comparisons](#)



What is the Cost of Delay or Inaction?
What is the cost of doing the wrong thing?



[What is the cost of delay
or inaction?](#)



Everything You Always Wanted
to Know About Waste-to-Energy
And Other Stuff
(But Were Afraid to Ask!)



[Waste-to-Watts](#)



Reinforcing, Strengthening, Hardening
& Undergrounding the Grid in Puerto Rico



[Reinforcing - Strengthening –
Hardening - and Undergrounding
the Grid in Puerto Rico](#)



Underground Transmission Lines &
Category 5 Hurricane-Proof Buildings –
A Concept for Puerto Rico

By Jim Vianello
Founder / CEO
Vortex Energy Group LLC
www.VortexEnergyGroup.com

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[Bright Ideas –
Puerto Rico Readiness](#)

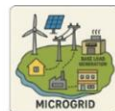


Battery Energy Storage Systems
(BESS)
Integration into Waste-to-Energy
(WtE) Sites

By Jim Vianello
Founder / CEO
Vortex Energy Group LLC
www.VortexEnergyGroup.com

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[Bright Ideas BESS
Integration with WtE](#)



Microgrids (Islanding)



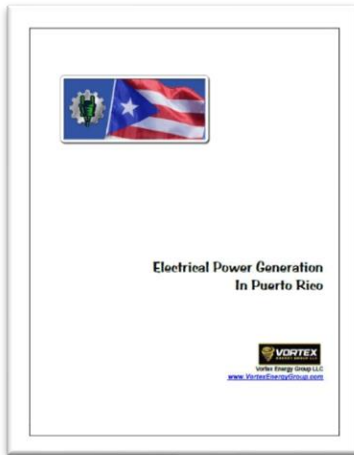
[Microgrids \(Islanding\)](#)



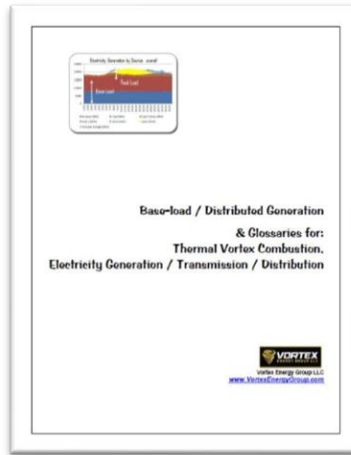
Smart Grids
(Including Deployment and Status
in Puerto Rico)



[Smart Grids Including Deployment
and Status in Puerto Rico](#)



[Electrical Power Generation
in Puerto Rico](#)



[Base-load - DG and Glossaries](#)



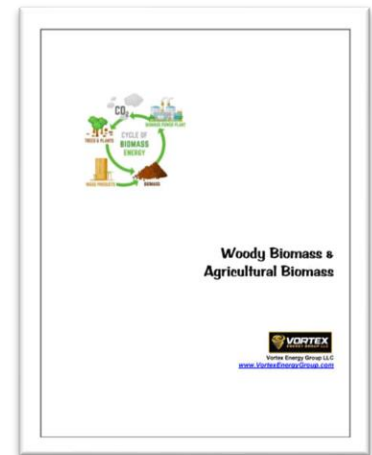
[Sargasso \(Sargassum\)](#)



[Landfills](#)



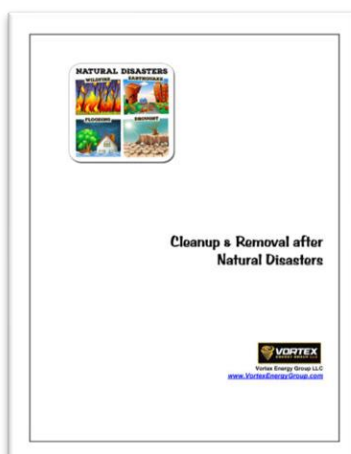
[Municipal Solid Waste \(MSW\)](#)



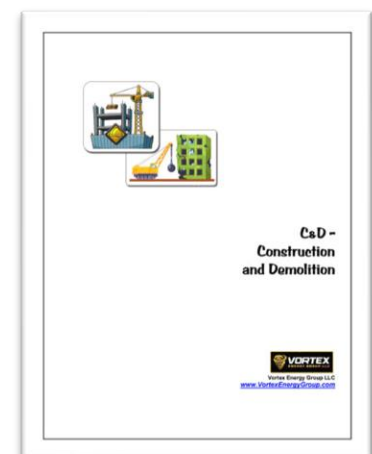
[Woody & Agricultural Biomass](#)



[Scrap Tire Disposal](#)



[Cleanup & Removal after
Natural Disasters](#)



[Construction and Demolition
C and D](#)

Complete Library of Booklets and Documents – Energy Principles and Technical Info

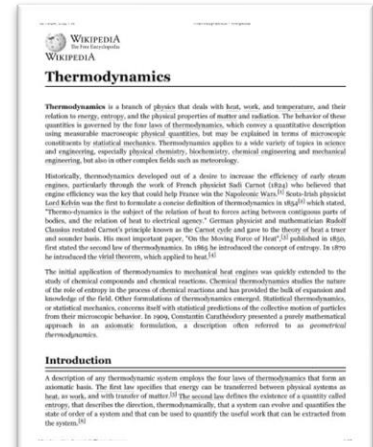
Below are several booklets, documents, and articles related to various aspects of energy – from basic energy principles to energy law, to energy recovery components (waste heat boilers and steam turbines), to carbon capture, and more. Don't let the title scare you... only some of this information is very technical, and other documents may offer details, covering so many aspects of this very complicated business. It's complicated because there are so many angles and directions that are involved, but like Tom Hanks said in *A League Of Their Own*, "It's supposed to be hard. If it wasn't hard, everyone would do it. The hard is what makes it great" – Stick around folks, this is going to be fun!



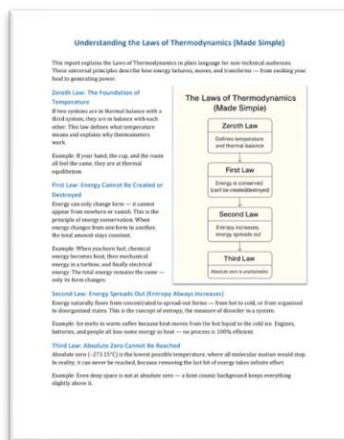
[Basic Energy Principles](#)



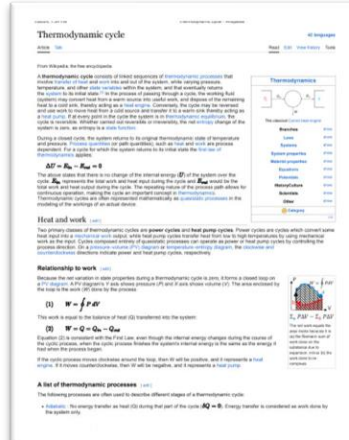
[Enthalpy](#)



[Thermodynamics - Wikipedia](#)



[Understanding the Laws of Thermodynamics \(Made Simple\)](#)

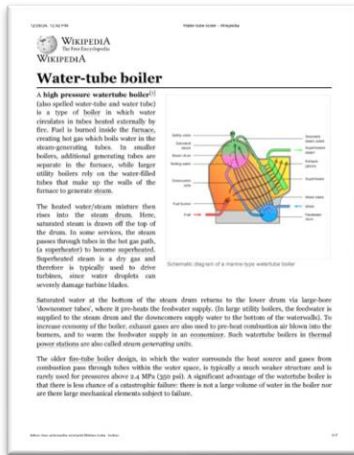


[Thermodynamic cycle](#)



[Power Cycle - an overview ScienceDirect Topics](#)

Cogeneration - CHP
– Wikipedia



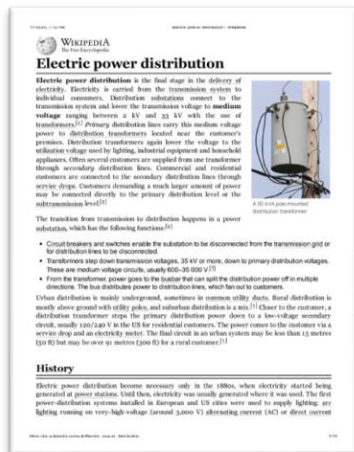
Water-tube boiler – Wikipedia



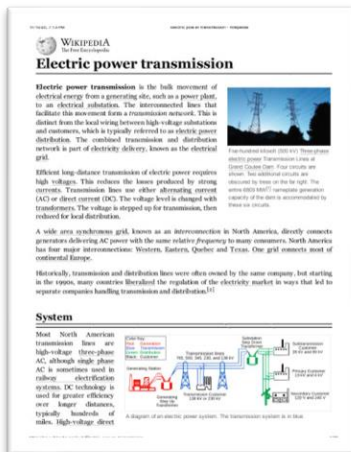
Heat recovery steam generator – Wikipedia



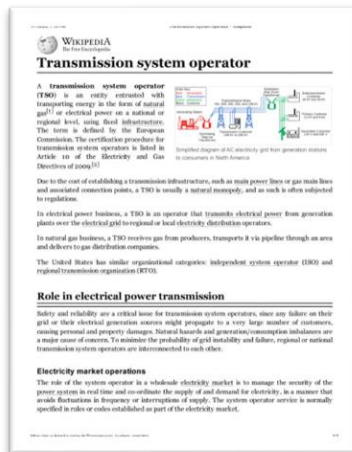
Steam turbine – Wikipedia



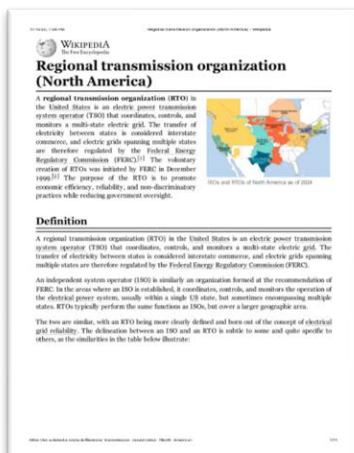
Electric power distribution – Wikipedia



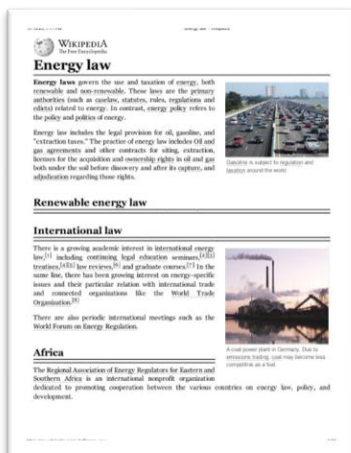
Electric power transmission – Wikipedia



Transmission system operator – Wikipedia



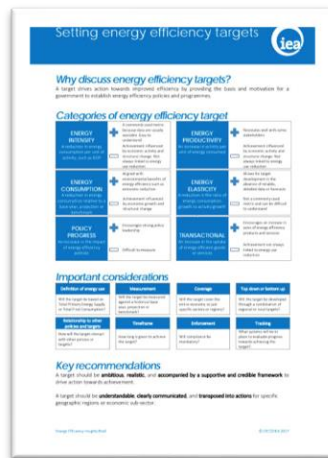
Regional transmission organization (North America) – Wikipedia



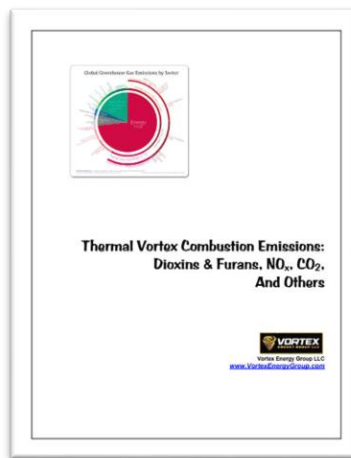
Energy law – Wikipedia



TRL Explanations



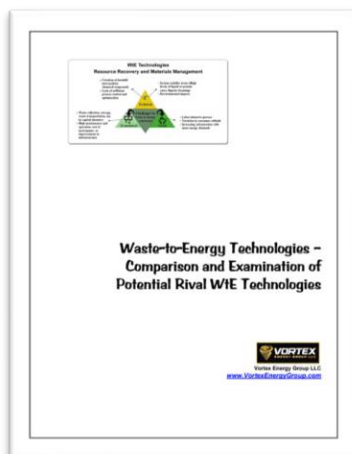
[Energy Efficiency Targets Energy Efficiency Insights Brief](#)



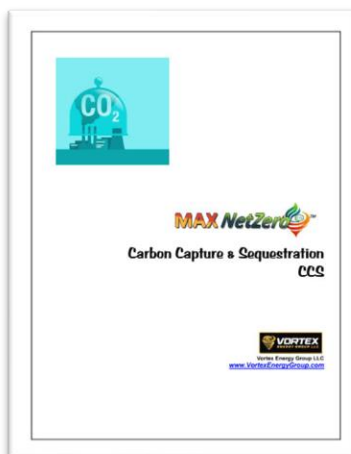
[Thermal Vortex Combustion Emissions - Dioxins and Furans, NOx, CO2, and Others](#)



[Waste-to-Watts](#)



[Comparison and Examination of Potential Rival WtE Technologies](#)



[Carbon Capture and Sequestration – CCS](#)



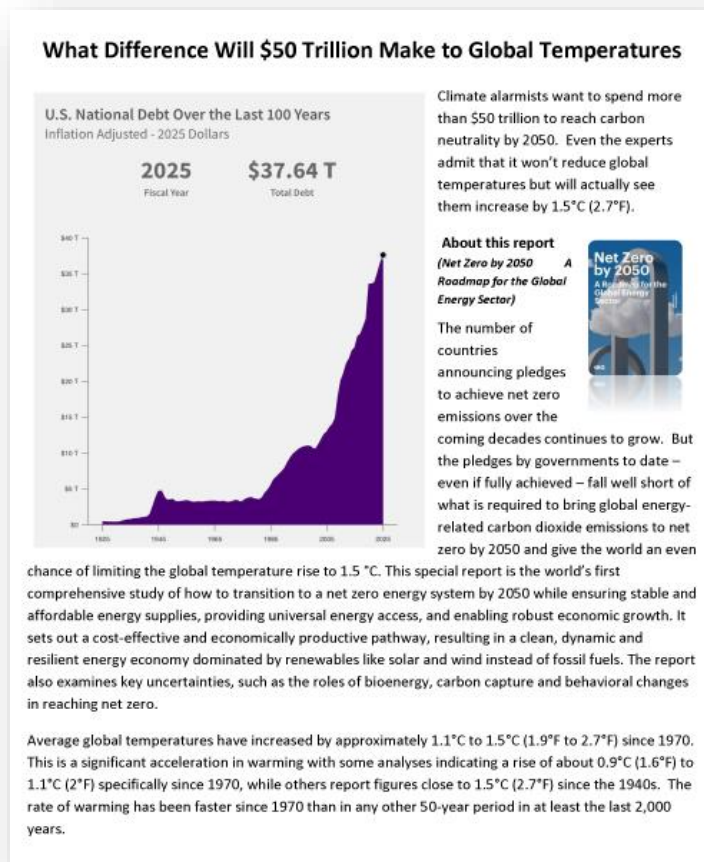
[MAXSeparation - Screening Sorting Separating Process](#)

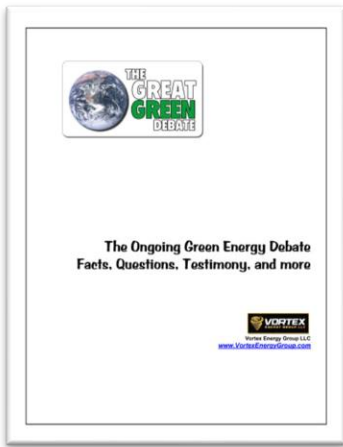
Complete Library of Booklets and Documents – Climate Change and the Green Debate

Below are several booklets, documents, and articles related to climate change, standards, Environmental | Social | Governance (ESG), net zero and carbon neutrality, outlook, failed predictions over the past 60 years, US Dept. of Energy critical review, and more. This is always one of those sensitive topics, because the second someone shows any doubt about certain comments and opinions, they are immediately labeled “Climate Denier.” The issue I have with that is for far too long, civil discord has not been possible because calmer heads aren’t prevailing. All we want to happen is for some way for folks to sit down and discuss the issues like adults, without hurling pejoratives and ridiculous attacks. For the record, I honestly don’t know anybody that has questions and raises doubts believe there is no climate change. Yes, I know the joke where a response is that “climate change is real, it’s called Winter, Spring, Summer, and Fall.” But in all actuality, there is no doubt about rising temperatures... but the question is if they are caused by human activities, or anthropogenic. What causes doubt is the simple inconvenient truth that the facts that have been offered up rarely pan out. Which is a good thing. But when it happens over and over, people start to question anything that sounds like doom and gloom.

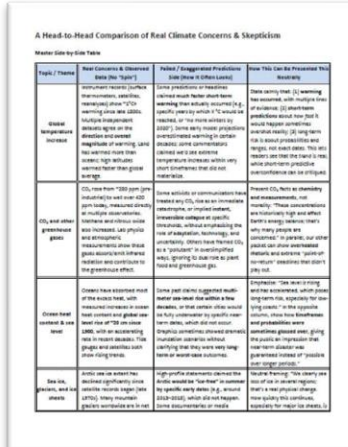
But the issue isn’t a problem for us. If you believe in man caused climate change is real, our solution is perfect. If you don’t believe that, our solution is still perfect. How’s that for being neutral? In all seriousness, we don’t have to take one side or the other. Our technology is completely eco-friendly and can fit into any waste-to-energy program.

But our concern is how much money everybody thinks should be thrown at the issue to fix it. Money won’t help, as this information below shows. We need to be taking a smart approach, not an emotional one.

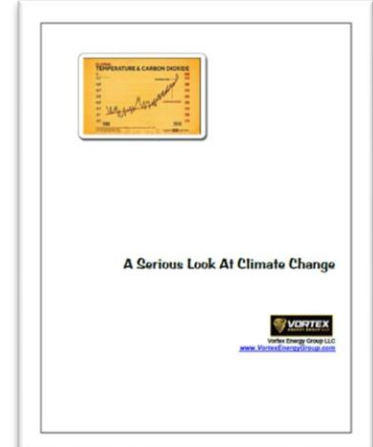




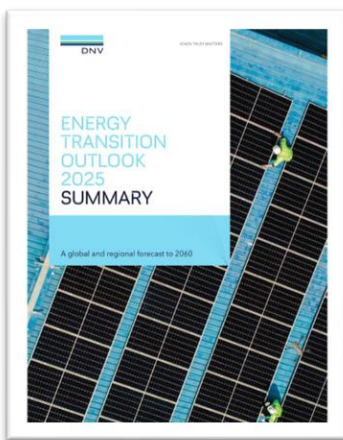
[The Ongoing Green Energy Debate](#)



[A Head-to-Head Comparison of Real Climate Concerns & Skepticism](#)



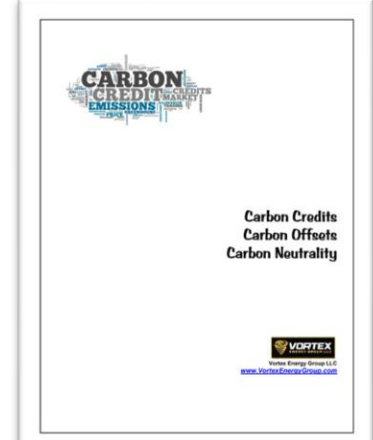
[A Serious Look at Climate Change](#)



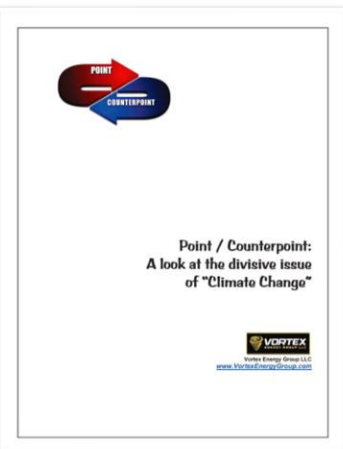
[DNV Energy Transition Outlook 2025 Executive Summary](#)



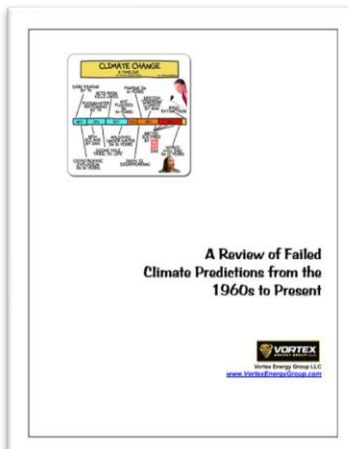
[Net Zero by 2050 - A Roadmap for the Global Energy Sector Summary](#)



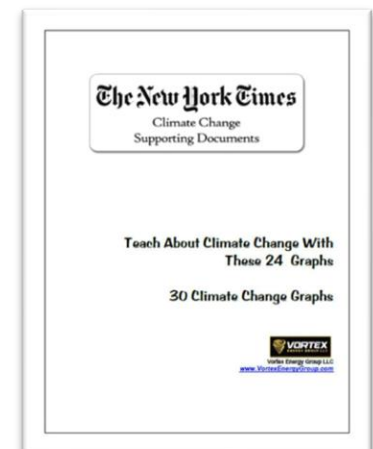
[Carbon Credits - Carbon Offsets - Carbon Neutrality](#)



[PointCounterpoint - A look at the divisive issue of Climate Change](#)



[Failed Climate Predictions from the 1960s to Present](#)



[The New York Times Climate Change Supporting Documents](#)



Vortex Energy Group LLC's View of
Environmental / Social / Governance (ESG)



[Environmental, Social,
Governance \(ESG\)](#)



Bill Gates Admits That
Climate Change Won't
Cause "Humanity's Demise"



[Bill Gates Admits That Climate Change
Won't Cause 'Humanity's Demise'](#)



A Critical Review of Impacts of Greenhouse
Gas Emissions on the U.S. Climate

Climate Working Group
United States Department of Energy
July 15, 2015

[A Critical Review of Impacts of
Greenhouse Gas Emissions on
the US Climate Summary](#)