



## Virtues of Low Cost and Reliable Energy

Mr. Steve Rendle  
CEO VF Corporation  
8505 E Orchard Rd.  
Greenwood Village, CO 80111

Mr. Rendle,

I am proud to be the CEO of Innovex Downhole Solutions. We are an industry leader providing tools and technologies to service oil and natural gas producers worldwide. Our work enables our customers, employees and communities to thrive.

Low-cost, reliable energy is critical to enable humans to flourish. Oil and natural gas are the two primary resources humanity can use to create low-cost and reliable energy. The work of my company and our industry more broadly enables humans to have a quality of life and life expectancy that were unfathomable only a century ago.

The merits of low-cost and reliable energy are too numerous to cite in totality but here are a few key highlights:

- Lifespans and quality of life have expanded dramatically over the last 150 years, enabled by access to abundant energy.
- Low-cost and reliable energy enables life-saving technologies. For example, the new Pfizer vaccine must be stored at  $-70^{\circ}\text{C}$ . This would be impossible without low cost and reliable energy.
- American industry is dependent on low-cost and reliable energy to thrive and compete internationally.
- More than a billion people worldwide live today without access to electricity<sup>1</sup>. As a result, these people live shorter, more difficult and dangerous lives than necessary. The solution to this problem is more low-cost and reliable energy, not less.

Hydrocarbons are the only source of supply for the vast majority of our low-cost and reliable energy needs. The Oil and Gas industry is essential to enable human flourishing and no low-cost and reliable alternative exists:

- Oil and natural gas are the only viable sources for low-cost, reliable energy today.
- Wind, solar and many other alternatives suffer from an intermittency problem that has not yet been solved.
- Any attempts to move our energy consumption to these unreliable, higher-cost sources of energy will have many negative impacts for humanity as it will dramatically decrease our access to low-cost and reliable energy.
- For example, Germany has endeavored to transition their energy grid to alternatives such as wind and solar with disastrous consequences. Electricity costs in Germany have tripled over the last 20 years and are roughly 2x the US costs (which are themselves elevated due to the partial shift to unreliable, intermittent sources of energy in the US)<sup>2</sup>.



- Oil and natural gas are used in many other important ways to create materials that go into thousands of critical products including, clothes, smart phones, vehicles and life-saving medical devices.
- Lastly, the Oil and Gas industry is a bastion of high-quality, high-paying, industrial jobs for our people. Last year, Innovex employed ~650 people and paid our employees an average salary of >\$85,000 per year. More than 230 of our employees earned over \$100,000 last year. The majority of these individuals do not have a college degree and achieve these high levels of income due to their intelligence, dedication and work ethic. We need more high-quality jobs staffed with individuals like my team members in this country, not fewer.

Frequently people are concerned about the impacts of CO<sub>2</sub> released from the burning of hydrocarbons. I acknowledge that CO<sub>2</sub> is a greenhouse gas and modest increases in CO<sub>2</sub> level will have modest impacts on global temperatures. However, I think the climate catastrophists who claim we will endure dramatic negative impacts from these changes are terribly wrong and misunderstand how low cost energy can help us adapt to our ever changing climate:

- The US Oil and Gas Industry has enabled an ~14% reduction in US CO<sub>2</sub> emissions over the last decade, largely as a result of significant growth in Natural Gas production<sup>3</sup>
- Climate related deaths have declined ~90% since the beginning of the 20<sup>th</sup> century<sup>4</sup> as a direct result our society is more robust against floods, draughts, storms, wildfires and extreme temps
- As there has been a modest increase in CO<sub>2</sub>, there has been an increase in carbon dioxide fertilization in plants across the Globe. According to NASA<sup>5</sup> there has been significant greening of the Earth over the last 35 years
- This greening combined with incredible technological progress enabled by low cost and reliable energy has led to a dramatic decrease in death by famine. The death rate due to famines has declined by more than 95% over the last century<sup>6</sup>.

At this point, you may wonder why I am directing this letter to you, the CEO of one of the world's largest apparel companies. We recently contacted North Face to inquire about buying jackets with the Innovex logo for all of our employees as Christmas presents. We viewed North Face as a high-quality brand that our employees would value and cherish for years to come. Unfortunately, we were informed that North Face would not sell us jackets because we were an oil and gas services company.

The irony in this statement is your jackets are made from the oil and gas products the hardworking men and women of our industry produce. I think this stance by your company is counterproductive virtue signaling, and I would appreciate you re-considering this stance. We should be celebrating the benefits of what oil and gas do to enable the outdoors lifestyle your brands embrace. Without Oil and Gas there would be no market for nor ability to create the products your company sells.

I appreciate your consideration and look forward to hearing from you.

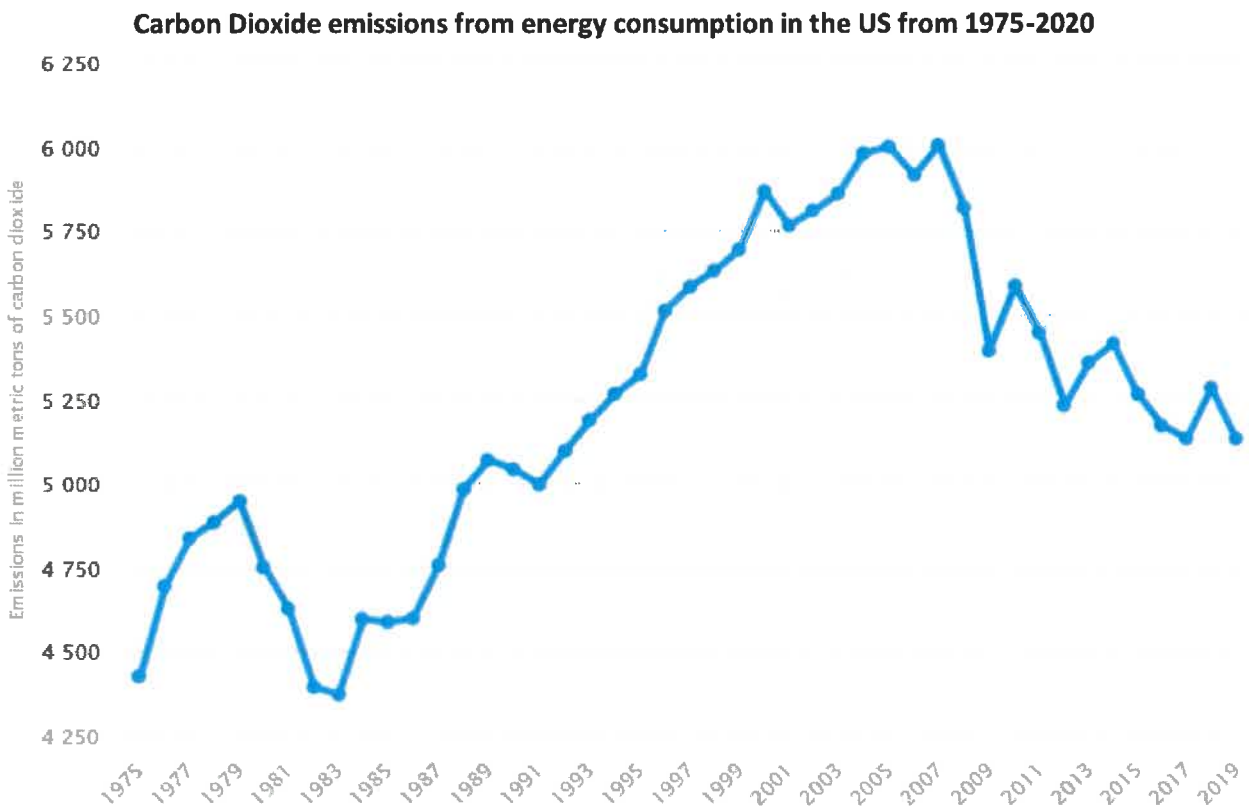
A handwritten signature in black ink, appearing to read "Adam Anderson".

Adam Anderson  
CEO Innovex Downhole Solutions  
4310 N Sam Houston Parkway E  
Houston, TX 77032

Sources:

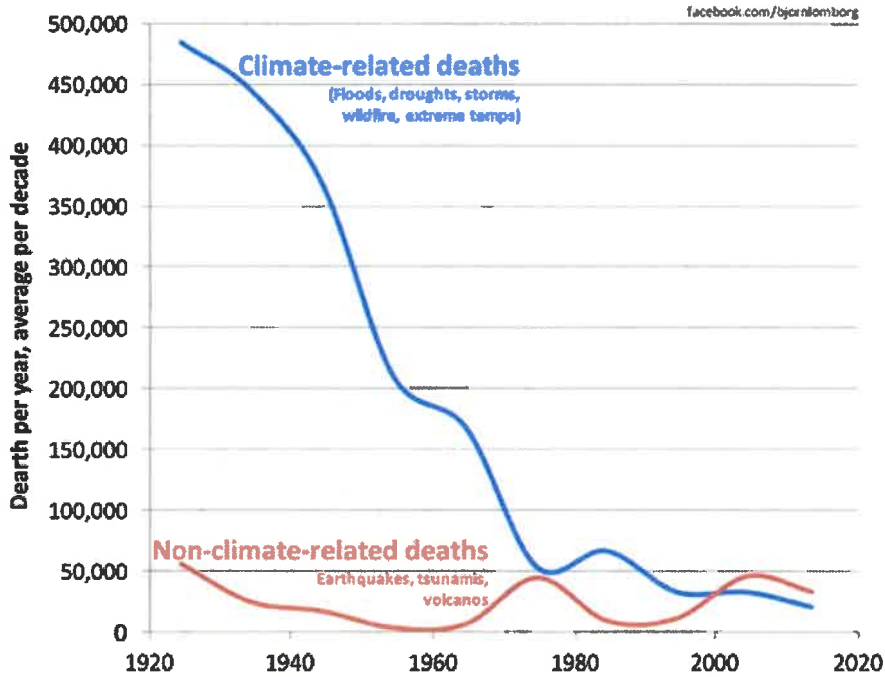
- 1 - <http://data.worldbank.org/data-catalog/world-development-indicators>
- 2 - <https://www.cleanenergywire.org/factsheets/what-german-households-pay-power#>
- 3 - <https://www.statista.com/statistics/183943/us-carbon-dioxide-emissions-from-1999/>
- 4 - OFDA/CRED International Disaster Database, [www.emdat.be](http://www.emdat.be)  
<https://fee.org/articles/climate-related-deaths-are-at-historic-lows-data-show/>
- 5 - <https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth>
- 6 - <https://ourworldindata.org/famines>

Charts:



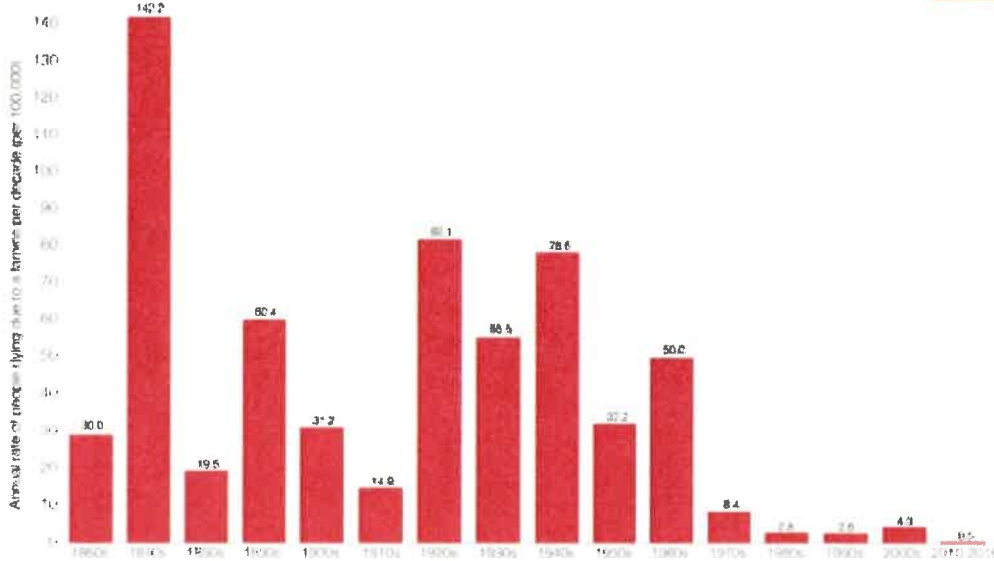
Source: Statista 2020

## Deaths from Climate and non-Climate Catastrophes, 1920-2017



OFDA/CRED International Disaster Database, [www.emdat.be](http://www.emdat.be), averaged over decades 1920-29, 1930-39, ..., 2010-2017

## Annual rate of people dying due to a famine globally, per decade



Data source: The rate of the world's population dying due to famine over time is presented in this Our World in Data chart. The chart was constructed by our team and data from the following sources: The annual rate is calculated for each decade by dividing the total number of famine deaths in each decade by the average size of the world population in that decade and multiplying the resulting figure by 100,000 to convert the rate from deaths per 100,000 people to a rate per 100,000 people per year. To account for population growth, the annual rate is then multiplied by 100,000. The average population in the world is based on the population of the world in the middle of the decade. The population is split by decade and year by year. For further information, see the main sources and the methodology for this Our World in Data chart. The visualization is available at Our World in Data. Thank you for the feedback and constructive research and suggestions on future and global development. Contact: [ourworld@ourworldindata.org](mailto:ourworld@ourworldindata.org)