



Will the U.S. Blaze a Trail to Mass Extinction?

By Rev. Mac Legerton

When I was a child, the nuclear arms race was far from my mind. Then, we began climbing under our desks at school as a practice drill for a possible nuclear attack. As a young adult, I looked back on this activity and realized that it did what it was intended to do – it personalized the issue for me as a threat to my life and indeed to all life.

As an elder, I now realize that there is even a greater threat to humanity and life on Earth than nuclear war—though, unlike a nuclear exchange, this threat is a *slow-motion* catastrophe. Can you guess what it is? Here's a clue: it is something with which most people don't have a personal relationship. Tragically, some persons remain in total denial of its validity, much less its present danger. And that's the problem – that's why this threat needs to be more seriously addressed on the local, state, national, and international level.

What is it? It's the slow-motion but rapidly growing catastrophe of climate change. There's now good news amidst this seemingly overwhelming challenge. But the answer may surprise you. Today we know what is the #1 preventable cause of climate change. It's not coal, it's not nuclear, and it's not oil and gasoline. It's actually the use of the very fuel that is touted as being cleaner, greener, and cheaper than all the rest. This fuel is called "Natural Gas".

Let's start with its name – "Natural Gas". What is "natural gas". There's actually nothing "natural" about it when it is forcibly extracted from the ground through hydraulic fracturing, commonly known as "fracking". When something is forcibly ruptured from deep within the earth with the use of toxic chemicals, the last name you would use for it is "natural".

Fracking disrupts the geologic fault lines causing earthquakes, uses millions of gallons of fresh water that becomes permanently poisoned by unknown, cancer-producing chemicals added to it, creates air pollution during the drilling process, increases the risk of injury and explosions, raises major health risks to both people and place in close proximity to it, and changes the nature of both neighborhoods and landscapes. Fracking also leaves a massive carbon footprint of drilling wells as deep as 8,000 feet and then drilling horizontally over 10,000 feet; On top of all this, it leaks major amounts of gas into the environment.

So, what is this gas? It is 90-95% methane gas which is a hydrocarbon compound made up of one carbon atom and four hydrogen atoms (CH₄). It releases carbon into the atmosphere and produces carbon dioxide (CO₂) just like coal does when it is burned. Methane is not its trace element--it is its undisputed compound of this fossil fuel product. If a compound is 90-95% of a product, it makes sense to call it by that name. Doesn't it? Well, actually not if you want people to believe and think that it is something that it is not. It is un-natural methane gas produced under massive and highly toxic pressure and hazardous conditions.

Now that we know what this gas is, what does it do to the atmosphere and climate that is so dangerous? This hydrocarbon has properties that block the radiation of heat from Earth's surface 100 times more effectively than CO₂ (released from burning coal) during its first 10 years of release and 86 times more effectively in its first 20 years. Because of the climate emergency underway, the first 10 or 20 years matter most.

When utility companies and the larger fossil fuel companies state that they are committed to lowering carbon emissions, this just isn't true. They are radically escalating the most dangerous and worst of all fossil fuels in relation to its impact on the climate. Now the industry wants to expand production of methane gas all over the world by calling it "the most environmentally friendly fossil fuel" and a "bridge fuel" that we can safely use until we transition to 100% renewable energy sources.

Why would a major business industry want to call its product by another name? Perhaps for the same reason that the tobacco industry did not like the term "coffin nails" or "cancer sticks" for cigarettes. Honestly, there's a striking similarity between what are called cigarettes and natural gas. When both were produced and named, their harm was not fully known. Once the industries promoting them learned of their significant harm, they did everything they could to hide this knowledge from the public. They even hired scientists to deny their dangers. The tobacco industry was eventually sued, the truth was acknowledged, and billions of dollars were paid out in the tobacco settlement.

This same scenario that occurred with the tobacco industry needs to occur with methane gas and the fossil fuel industry. The major difference in these two scenarios is that this fossil fuel product doesn't just threaten the lives of individuals who voluntarily breathe it in – it threatens the lives of not only every human being, but also all life on the planet. The outcome of this scenario needs to be a moratorium and eventual end to all use of methane gas as an energy source. For the sake of all of us, our communities, and world, the sooner the better. This abomination is different. There is no time to waste.

Tragically, the truth about un-natural, methane gas has yet to be acknowledged by utility companies, by the fossil fuel industry at large, and also by policymakers, that frankly, remain uninformed and uneducated about its destructive power. When truth be told, it is not just very harmful to people, place, and planet. It's extraction, piping, and burning is the greatest threat to all life on the planet today, including the energy created by burning coal, splitting the atom, and using petroleum.

I hope you are beginning to get the picture. This is not fear-mongering or moral grandstanding. This is real and the stakes are high. Crawling under a desk or denying it will just make the outcome worse.

The best resource that I have found on the methane problem is *Train Wreck Earth: The Climate Emergency and a Plan to Solve it*, a new book by David Harman and Dr. Harvard Ayers from Boone, NC. This book exposes the myths about natural gas being the greenest fossil fuel, and the authors strongly support the elimination of fracking. Here is an excerpt from a "class lecture" in the book by noted Earth systems scientist, biogeochemist, and ecosystem biologist, Dr. Robert Howarth, who explains why methane can be the safety valve to help save us:

... It would take thirty to forty years or more for reductions in carbon dioxide emissions to have a demonstrable effect on the rate of global warming. Methane, on the other hand, is in the atmosphere for a shorter time period of only a decade or two. When it's gone, it gets oxidized into carbon dioxide, but it no longer has an influence as methane, and the climate is hugely responsive to changes in methane. If we reduce methane emissions now, it slows the rate of

global warming now. ... if we want to slow the rate of global warming between now and 2050, methane is really the thing we have to concentrate on.

Source: Harman & Ayers, 2017. Train Wreck Earth; p. 354.

In reality, methane gas is not “greener” than coal, nuclear, or oil. It is actually the most dangerous and destructive of all the fossil fuels when it comes to climate change and global warming. Scientists now know this. The dangers of burning coal are more well-known than the hazards of methane gas production and use. Investments in and use of coal are diminishing. In spite of this, the atmosphere is warming at a more rapid rate than even the scientists predicted. This alarming rate is now believed to be caused by the expanded extraction, production, piping, burning, and leakage of methane gas.

Unlike historical changes to Planet Earth’s climate which happened slowly over millions of years, human-caused climate change is rapidly bringing about heat, floods, drought, and instability to which most lifeforms will be unable to adapt.

In her book, The Sixth Extinction, An Un-Natural History, Elizabeth Kolbert describes how our planet has experienced five major patterns of mass extinction during its mysterious and beautiful history. The “Sixth Extinction” is now underway. Kolbert provides scholarly and indisputable evidence that human life and our modern industrial society and its use of fossil fuels are negatively impacting our environment and climate.

The planetary patterns of extinction match the prophecy delivered by Hopi elder Thomas Benyacya to the United Nations in 1982. In his delivery, entitled “The Hopi Message”, he spoke of our present-day experience as the fourth “Great Purification” in planetary history brought on by our own greed and materialism. The trail of previous extinctions and purifications have led to the destruction of more than 90% of all life on the planet. When this happens, organisms at the top of the food chain are most at risk of extinction. Today, that is none other than ourselves.

The level of denial and defensiveness regarding this reality of climate change is irrational for this very reason. Throughout human history, archeological studies have documented how humans have literally destroyed their own living environments. Examples include overpopulation, overconsumption and misuse of natural resources, and pollution caused by excessive human and additional animal waste. For knowledgeable persons to pursue denial of the human impact and that of modern industrial society on the air, water, plant and animal life, land, the atmosphere. and the climate is suicidal.

Hopefully, you now can comprehend the need to understand and curtail the destructive use and deceitful marketing of methane gas. I expect that this information on our planet’s five former extinction and purification patterns will cause all of us to pause and consider how our societies and nations contribute to hastening these occurrences. A review of the losses of plant and animal species and entire cultures on the planet in recent history will lead most, if not all of us, to the conclusion and acceptance of our living in the midst of a sixth extinction process on the planet. There is now one last insight to be gained before this teaching ends.

What is the climate’s “Tipping Point”? I kept hearing about this but never could figure out what it meant until I did some digging. The Tipping Point is the point at which no human intervention can restore the balance of nature and slow the rising temperature of our planet.

Ironically, this story also leads us back to methane gas. The source of that tipping point may be at the ocean’s dark floor where unthinkably enormous amounts of highly volatile, frozen methane gas is stored. As the ocean warms, the frozen methane will slowly thaw. This powerful heat-blocking

compound, once released, will cause the planet to heat even more, causing more methane emissions. This is called a positive feedback loop—a spiral. As a result of this spiral, change will happen too fast, and the mass extinction will proceed.

Given the risk of mass extinction spurred by climate change, why are our utility companies, along with the entire fossil fuel industry and some governments, determined to approve and build the infrastructure for the national and worldwide use of methane gas? If this be known, then why is it also being promoted as the #1 answer and “cash cow” for needed revenues for our states, nation, and modern industrial countries? Over half of the trade deals between China and West Virginia and China and Alaska announced in November 2012 were directly related to the production, use, and exportation of what product? It is methane gas.

In North Carolina, we are beginning to understand the truth about the proposed Atlantic Coast Pipeline, another huge investment in infrastructure that will condemn the South to another 40 years of fossil fuel use—in this case - methane gas. At least 80% of the methane gas will be used to generate electricity for Duke and Dominion and much will likely be exported on world markets as LNG—liquified natural gas. We now know that all new electric-generating capacity simply must come from renewables, not fossil fuels. The restrictions on economic development and the uncertain property taxes that the pipeline promises are now surfacing. But its owners have been no more transparent in relation to these issues than they have to the harmful nature of methane gas to our state’s most vulnerable environment and vulnerable people along the proposed route. The reality of the harm of methane gas as less green, less clean, and in the end, more expensive to the environment, global warming, and humanity has been denied.

If you have a product that is actually very harmful and you want people to consume it anyway, your strategy is simple: create dependency on the product as quickly as you can. Develop the infrastructure as rapidly as possible. Hook individuals, counties, states and nations into becoming dependent on this product as a major revenue and consumer source. As a result, its harmful nature and even the risk of mass extinction will not curtail its use until after trillions of dollars have been made by all of its public and private partners.

The pressure to approve methane gas pipelines everywhere, to construct new gas-powered plants and shift old ones from coal, and to export this methane gas all over the world – it’s all being done in the name of jobs, advancing rural and national economies, making literally trillions of dollars for the fossil fuel industry, and creating a new, long-term dependency on the most environmentally-destructive, fossil fuel.

What’s the energy solution? In short, we need to move as rapidly as possible toward renewables while keeping minimal use of coal and nuclear as bridge fuels. We need to nationally and internationally halt all development of methane gas and hydraulic fracturing. If we are serious about jobs and our economies, the development, production-and use of solar energy and wind energy are already out-competing the fossil fuel economy on every account. The jobs and economic argument for methane gas production is financially, politically, and environmentally irresponsible.

We thought World War III would most likely be a full scale nuclear war. Then policy makers realized that the next war would probably be over water and water resources. Now we realize that human conflict is headed down another trail – that of how, we as a human species, will manage our declining use of all fossil fuels while we move toward the majority use of renewable energy sources.

We are in this transition from fossil fuels to renewable energy right now. How will we transition to renewable energy fast enough to avoid the worst outcomes? There are three options: evolution, revolution, and extinction. Will it be down a trail of rapid evolution and development of renewable sources? Will it be down a trail of revolution and conflict through both legal and violent settlement? Or will it be down the trail of mass extinction? My hope and prayers are that we walk down this first trail together.

We need a state, national and international moratorium on the production, use, and exportation of methane gas until this debate can occur. We certainly need to stop building more fossil fuel infrastructure, particularly methane gas pipelines and gas-powered plants. The last thing we need to do is export it around the world.

Expanding the very products of addiction will only exacerbate its obsession and lead to further injury and ultimate demise. In relation to fossil fuel management and use, the last action we need to take is to rush down the trail of developing what we now know to be the least green, least clean, and most expensive and harmful fossil fuel in its impact on global warming and climate change.

I live close to the supposed endpoint of the second most expensive and the third longest methane gas pipeline in the history of our nation. This threat is personal to me, much more so than my childhood experience of crawling under the desk.

The question that haunts me is: how do we make this same, massive threat personal with those whose lives or opinions seem far removed from this present danger? The issue seems so large, untouchable, or with a solution that is inevitable. How do people already challenged by the burdens of daily living personally connect to this larger threat?

Will the U.S. blaze a trail to mass extinction? It now seems likely unless we rapidly wake up and collectively persuade our stakeholders on all levels to choose another path. In our own ways, we need to feel this threat personally and care enough to work for the cure. This will motivate us into action on the local, state, national, and international levels. Massive pipelines, plants, and expansive product export are not inevitable. As a result of our united influence and action, all may realize what's at stake. Then, together, we can blaze a much healthier, saner, respectful, and restorative trail for us, our children, and our future generations.

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