

## Opinion

# The First Step Is Admitting You Have a Problem

What my time working on a North Dakota oil patch taught me about America's fossil fuel addiction — and how to curb it.

By **Michael Patrick F. Smith**

Mr. Smith is a folk singer and playwright based in Kentucky. He is the author of the forthcoming “The Good Hand: A Memoir of Work, Brotherhood, and Transformation in an American Boomtown,” a book about his time working on the oil fields of North Dakota.

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Look around you: chances are that every object within your field of vision contains refined petroleum.

The varnish on your desk, the paint on your walls, the finish on your floors. Unless the chair you are sitting on is made of untreated wood, then your butt is resting on synthetic materials derived from petrochemicals. Plastic is petroleum based: the components of your phone and computer, your printer and audio speakers. Take a sip of coffee and think about it. The glaze on our mugs comes from oil.

Oil was once thought to have mystical properties. In western Pennsylvania, the cradle of American oil exploration and production, shamans from the Seneca tribe used the strange black substance in ritualistic healing exercises. They also used it to cauterize wounds and seal canoes. For white men, the gunk seemed more trouble than it was worth. With grease gumming up salt drilling operations in the area, a local entrepreneur found a way to profit from it, mixing it with liquor and selling the drink as a cure-all. Oil has been linked to medicine ever since.

Delivery agents such as gel caps, balms, salves and gelatin pills contain petroleum. More important, as a 2011 study titled “Petroleum and Healthcare” points out, “nearly 99% of pharmaceutical feedstocks and reagents are derived from petrochemicals.” Acetylsalicylic acid, the active ingredient in aspirin, for instance, is created by a chemical reaction involving petrochemicals. Oil doesn't simply transport medicine

into our systems. It isn't too far off base to say that much of medicine *is* oil.

In 1858, Edwin Drake arrived in the town of Titusville, Penn., near the home of the Seneca, with the express desire of drilling the world's first oil well. Drake was a 39-year-old railroad worker with a bad back. A sucker's sucker, he had embarked on his journey under a one-year contract with the Seneca Oil Company signed on April Fools' Day. He had no experience in business or mining; his main qualification seems to have been a starry-eyed gullibility. Titusville was barely a town. Upon arriving, Drake had to travel 45 miles to buy a shovel. However, he stuck it out. Our man got his shovel! More than a year after arriving, Drake struck oil.

Refined into kerosene, oil quickly came to replace whale fat as the world's primary illuminate. It was the first spark to truly brighten millenniums of darkness. Kerosene made the day longer. It may seem mundane now, but at the time, this was described in quasi-religious terms.

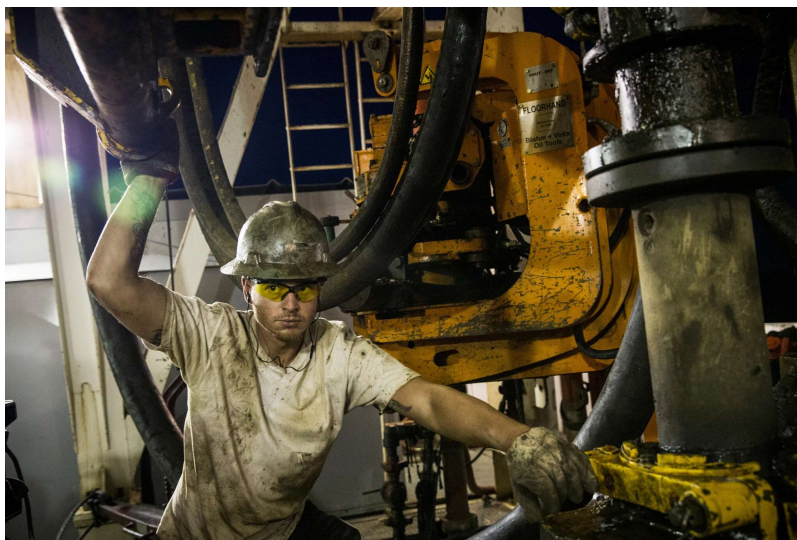
Like so many of the now assimilated effects of life in the carbon age, it is all but impossible not to take this for granted, but indoor lighting revolutionized life on earth. Factories that once closed their doors at dusk could now run 24 hours a day. Students could study after dark. Until humans refined petroleum, neither was true. It remains true now that kerosene is considered impractical (a lot of people blew themselves up lighting the lamps) because of electricity, which is often powered by coal and natural gas. When the sun goes down, we have light because of fossil fuels.

We also have man-made climate change. This puts us in a position of paradox. The very thing that sustains our modern way of life has become a threat, possibly the greatest threat to life on earth in the history of humankind. As any addict will tell you, the first step is admitting you have a problem. And a problem this big requires bold political, economic and technological moves. It also requires — and we can't allow ourselves to forget this — cultural and personal change. Because while life itself is irreplaceable, a way of life is basically “stuff we do.”

As we accept our responsibility to address this awesome generational obligation, and as we work to put in place policies that balance our need for bold action with the more modest day-to-day needs of working people, it would behoove us to keep in mind the story of this precious resource, to consider how it connects us each to the other, and to contemplate, not only what we must sacrifice, but also what we stand to gain by greatly reducing our reliance on it.

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**I hadn't given much thought to any of this until** I experienced my own personal oil boom. In 2013, I traveled west to Williston, N.D., where like thousands of other men looking for work, I applied for jobs in the oil field. The housing crash, along with a spike in worldwide oil prices, as well as advances in drilling technology — horizontal drilling and hydraulic fracturing, better known as fracking — had combined to make northwest North Dakota go boom.



A floor hand on an oil rig in North Dakota. Andrew Burton/Getty Images

Drilling companies moved in and workers, like me, followed. Williston's population in 2008 was around 12,000. Within five years, it had tripled, some say quintupled. Men slept in their trucks outside the town's Jobs Services office. I rented a mattress on a flophouse floor in a three-bedroom townhouse packed with migrant workers. We were chasing the money that was chasing the oil.

I landed work as a swamper for a rig moving company. Rigs drill until they get the oil flowing, then they need to be pulled apart, loaded onto tractor-trailers, moved, and — like skyscraper-sized Lego sets with pieces the size of fire trucks — put back together over a new well head. A swamper is basically a rigger. My days were spent at the back end of a crane or gin truck, slapping chains and hooks onto

incredibly heavy steel objects and trying not to kill anybody.

I vividly remember the first time I saw a derrick raised. The derrick is the tower that supports the network of pipe that is inserted into the earth for drilling. Watching it pivot slowly upward to 160 feet in the air, framed by a window of perfect blue sky, I took out my phone and recorded a video. I was bearing witness to the beginning of a process in which men would wrestle the modern age's most precious material from deep inside the earth. There was something weirdly magical about it.

As rough and rowdy as many of the oil field hands I worked with were, these men knew oil. They knew it from the top of their invert smeared hard hats to the bottom of their steel-toed boots. And they taught me. Until then, if I thought about it at all, I thought of oil only in terms of transportation and war. But my co-workers' practical knowledge piqued my interest. I began delving into the history of black gold.

A decade after Drake's Well struck oil in Pennsylvania, a gasoline-powered internal combustion engine was attached to a pushcart. It wasn't long before the automobile was born. By 1900, about 4,000 cars lumbered down the dirt roads of the United States. By 1913, Model T Fords were falling off assembly lines. War pushed the new technology further into the future. It was American and British oil-fueled machines that defeated Germany's coal-burning operations in World War I, and then again, in World War II.

In 1956, President Eisenhower signed the Federal-Aid Highway Act, authorizing construction of 41,000 miles of interstate highways, the biggest public works project in American history. The bill not only profoundly altered America's topography, it also reshaped the way humans experience it. Lewis and Clark had navigated their way up North America's many natural rivers; after the Federal-Aid Highway Act, Americans would negotiate the country on rivers of oil, experiencing its natural beauty through the windows of cars: cars powered by the petrochemical gasoline, over roads built by the petrochemical asphalt. Oil became the boat and the river. Driving became an inextricable part of America's cultural identity, and as midcentury mass production combined with expendable incomes and the advertising power of television, so did consumerism.

Cheap and easy to manipulate, petrochemicals made into gasoline and diesel, plastics and resins, polyesters and nylons became the stuff of our homes, our clothes, our cars and, weirdest of all, the very food we eat.

#### OPINION DEBATE

*What should the Biden administration prioritize?*

- EDWARD L. GLAESER, an economist, writes that [the president should use his infrastructure plan](#) as an opportunity to “break the country out of its zoning straitjacket”
- THE EDITORIAL BOARD argues the administration should [return to the Iran nuclear deal](#), and that “at this point, the hard-line approach defies common sense.”
- JONATHAN ALTER writes that Biden needs to do now what [F.D.R. achieved during the depression](#): “restore faith that the long-distrusted federal government can deliver rapid, tangible achievements.”
- GAIL COLLINS, Opinion columnist, has a few questions about gun violence: “One is, what about the [gun control bills](#)? The other is, what's with the filibuster? Is that all the Republicans know how to do?”

In 1918 Fritz Haber had won the Nobel Prize for creating a process, incorporating methane, that made possible the widespread use of nitrogen fertilizers. On a subject that exceeds the resources of hyperbole, this is arguably the most significant scientific breakthrough in the history of mankind. At the turn of the century, there had not been enough found organic fertilizer on earth to sustain the crops needed to feed the world's growing population. Haber's invention fed the crops that fed the planet that allowed the population of earth to, not only survive, but quadruple. Without refined methane, inseparable from the Haber Process, most of us would have never been born. Our grandparents, if they were born at all, probably would have starved to death.

**Immediately upon his inauguration** as the 46th president of the United States, Joe Biden set to work on a bold plan to address climate change. On his first day in office, he revoked the permit for the Keystone XL pipeline and rejoined the Paris Climate Agreement. In his first week, he signed a series of executive orders aimed at putting climate change at the center of American foreign policy and national security and making it a primary focus of his administration's infrastructure and jobs programs.



America's political and media classes today could turn a bologna sandwich into a culture war issue. While 67 percent of the American public sees global warming as a serious problem, it is also certain the Mr. Biden will face serious opposition from Congress, from some Americans and from some news media as he tries to address the issue.

The main argument against a move toward greener infrastructure seems to be that these changes will cost the nation jobs. I went to work in the oil industry because I wanted money, lots of it, and fast, and going to the oil field felt like going to the source of all money.

Not long after I started, I had a conversation with a cranky gin truck driver nicknamed The Wildebeest. His father had also driven a gin truck, and The Beest was literally born in the oil patch, raised in company housing. He told me that if I wanted to work all the time, to essentially do nothing but work, that if I didn't mind missing holidays and birthdays and the occasional anniversary, and that if my body didn't break down from the toil, that if I kept all my fingers and toes, didn't throw my back out, or lose my nose to frostbite and give up, I'd make a *decent* living in the oil field. For a *while*.

A stone-cold fact of life in the oil field is that the jobs are hard, and they are temporary. Within a year of my leaving, Williston went bust, and many of my friends were out of work. A lot of workers eventually drifted down to West Texas, chasing the next oil boom. When the pandemic hit, the Permian went bust as well.

I'll just say that I'd find it easier to view arguments around job loss in good faith if the people making them had tried to make these jobs safer, more secure and better paying to begin with.

I'm not a policy expert. Since I left the oil field, I've worked as a bartender, a stage hand, a guitar player, a junk hauler and a furniture mover. Recently, the reading and writing I've done my whole life have been paying off, and I've had the opportunity to make a fair wage writing about things I care about, like the people I met in the patch.



An oil derrick in North Dakota. Andrew Burton/Getty Images

The men and women who work America's oil fields put their lives on the line to put gas in the tanks of our cars. From 2008 to 2017, roughly the same number of oil field workers were killed on the job as U.S. troops in Afghanistan in the same period. Like our soldiers, our oil field workers deserve our nation's respect, our gratitude and, when they need it, our tax dollars, too.

One solution to potential job losses surrounding, for instance, the cancellation of the Keystone XL pipeline would be very easy: build pipelines that actually benefit citizens of the United States. In 2019, North Dakota flared 19 percent of its natural gas production. The amount of open flames burning across the prairie when I lived there was visible from outer space. That gas is still burning now.

Investment in infrastructure of pipelines built to support natural gas capture in North Dakota would have the double positive effect of reducing flaring, a huge source of carbon emissions. And it would put the region's men and women to work.

Mr. Biden has also outlined a plan to cap leaky oil and gas wells. Leaky wells are unnecessary, wasteful emitters of carbon dioxide. Again, this has the potential to create well-paying jobs for oil field workers while reducing emissions. Common sense Republicans and Democrats should come together to find these types of win-win solutions to a problem everyone knows we have. This particular plan is as close to a no-brainer as you'll find in politics: jobs good, leaky oil wells bad.

One notable thing Biden's plan does not do is ban fracking. This is good. A fracking ban would put too many people out of work and, as long as our nation's power plants continue to run on natural gas, there is no reason to think it would accomplish its goal. We'd just import more gas from Canada, which might lower U.S. carbon emissions, but would raise them worldwide. Natural gas doesn't move itself.

Now I am certain there are pieces of Mr. Biden's plan that I disagree with. Like most Americans I know, I have both strong progressive and conservative values. I am using this space now not to harp on my disagreements with the new administration but instead to focus on areas where I can envision our politicians coming together. I, like most Americans I know, want my government as well as my friends to roll up their sleeves and get to work.

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**It is ironic to me** that, in general, my conservative pals in rural America live much less carbon-intensive lives than the liberal city dwellers I know who obsess over global warming. It may not be a coincidence that the less-concerned folks tend to have better skills to survive a collapsing world: They hunt, they fish, they're handy with guns, some of them have experience growing their own food. But I find it hilarious that for my liberal pals interested in sustainability, their best teacher might just be that conservative cousin with the gun rack in the back of the truck.

I've spent most of my life in cities. But I moved from Brooklyn to Lexington, Ky., at the beginning of the coronavirus pandemic. One of the few people I've regularly seen in person over the past several months is my hairdresser Jessica whose bright eyes and salty sense of humor have had me howling in the barber's chair.

Jessica and her husband run a farm where they grow and can most of their own vegetables, and butcher and process much of their own meat. She views this not only as part of a tradition passed down by the women of her family — she still uses her great-grandmother's canning recipes — and not only as a personally satisfying way to live, but also as a cultural necessity in the fight for a cleaner, healthier planet.

Many of us feel buried under the overwhelming data surrounding climate change. Many of us feel that our individual actions are insignificant in the face of such a monumental problem. If we stop buying single use plastic, we say to ourselves, will that really put a dent in worldwide carbon emissions? The question itself is an existential crisis.

Whether Mr. Biden's full agenda is put in place or not, there is much we, as citizens, can do. Mostly we can do what we can. The cars we drive, the items we have delivered, the trips we take, the clothes we wear, the plastic we use and then toss out, these things not only contribute to climate change, they degrade and destroy our planet in other ways as well. Should wind and solar and electric replace fossil fuels in the next 30 years, will we celebrate this accomplishment by maintaining our habit of littering?

When I asked Jessica about what her and her husband's farm affords her now, it is telling that she doesn't mention *stuff*. She becomes nearly breathless talking about community and love.

Her friends, she says, are "in awe." They come to learn about pressure canning and preserving. "They get to experience the satisfaction of start to finish meal making, and doing it together is a wonderful experience that I love to share because I truly love to cook and feed my friends and family."

In the oil field, a valued worker is referred to by a sly piece of slang as a "good hand." Good hands knows their job; they show up early, take on the most difficult tasks, do their work well, and don't complain. No one is a good hand all the time, you have to make a hand every day, but the phrase, as I interpret it, connotes the ideal of personal responsibility at the service of a collective good. It is aspirational.

Not everyone is going to be able to own a farm or grow their own food. But as citizens of the world, we must begin to treat petroleum with the respect it deserves. We must value it, like our very lives, as a precious, almost magical, but certainly finite resource. Then we can begin to do the meaningful work that nurtures our planet, nurtures our friendships, and creates lives of joy.

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