



# anthropology

MARCH/APRIL 2020

VOLUME 61 | ISSUE 2

# NEWS

## Death of a Glacier

### CLIMATE

Scientists Predict the Future for Antarctic Ice

The Social Lives of Climate Reports

Forensic Anthropology in a Changing Climate

The Long View of Climate Change and Human Health

After Oil

Unsustainable City

My Petrochemical Love

Published bimonthly  
by the American  
Anthropological  
Association



# After Oil

TO NAVIGATE THE GROWING STORMS OF CLIMATE CHANGE, ST. CROIX IS DOUBLING DOWN ON THE FISCAL PROMISE OF OIL. RESIDENTS DEMAND OTHERWISE.

By David Bond

St. Croix stands at a climate crucible. For 50 years, a massive oil refinery underwrote economic development on this US territory in the Caribbean before the plant closed abruptly in 2012. Today, the aftershocks of fossil fuels—whether in a legacy of toxic pollution or the rising fury of superstorms—threaten life on St. Croix. Facing up to these challenges is a costly affair, and many worry over how to build a future that can rise above the throes of petro-capitalism. Backed by pedigreed expertise, one plan gains momentum: heavily subsidize the rebooting of the refinery in the hope of bending the fiscal properties of fossil fuels into new investments in climate resiliency. For many civic groups and residents, such a plan seems the very definition of foolhardy. Battered and bruised by the environmental properties of fossil fuels, citizens demand a forceful break with the refinery to secure a more sustainable future today. The situation in St. Croix raises a crucial conundrum many of us are beginning to inhabit: Just how does oil end?

While I was conducting fieldwork on the island in 2011, the HOVENSA refinery on St. Croix broke down in spectacular fashion. That summer explosions rattled the neighborhoods around the refinery as black smoke draped the verdant landscape in what looked like sooty cloaks. Explosion after explosion was followed by emergency warnings to shelter indoors and refinery employees in hazmat suits went door-to-door to skim the oily surface off residential rain catchment basins. Built in 1967, the HOVENSA refinery soon became the largest oil refinery and petrochemical plant in the world, an imperial feat that unfolded under the radar of popular and scholarly considerations of the wider Caribbean. As students and leaders of the Caribbean rallied around the image of the sugar plantation in the making of the region, huge oil refineries such as HOVENSA became the largest site of foreign investment in the Caribbean, a leading source of state revenue, and one of the region's primary employers. My research unpacked this neglected history, charting how entrepôt oil refining advanced a new geography of US empire and sparked novel forms of ecological resistance across the Caribbean (Bond 2017).

During its heyday, HOVENSA generated enough revenue to transform the modest island of St. Croix into a paragon petro-state. On paper, the economy

EMILY THIESSEN

flourished as the territorial government was flush with refinery tariffs, almost magically able to hire its way through every economic downturn. As is so often the case, such fiscal wealth came at tremendous ecological cost. The explosions of 2011 helped bring HOVENSA's imperial place on the island—its exported profits and gathered injuries—into unsettling focus. As explosions continued, Environmental Protection Agency (EPA) investigators were sent in. They soon uncovered longstanding practices of deferred maintenance and questionable shortcuts, even as several joined with executive staff from the refinery at tropically themed parties that flowed with booze and lavish meals in the evenings.

Contamination, it turns out, was built into the design. As one investigator explained to me, "Every pipeline carrying a saleable product was built above ground. Every pipeline that carried waste products was installed below ground." Comprised of six miles of cast iron pipeline, some up to 30 inches in diameter, the entire waste stream was buried in the salty sand. They started rusting almost immediately. In 1982, the refinery estimated 300,000 barrels of petrochemicals had leaked from these pipelines and formed a petrochemi-

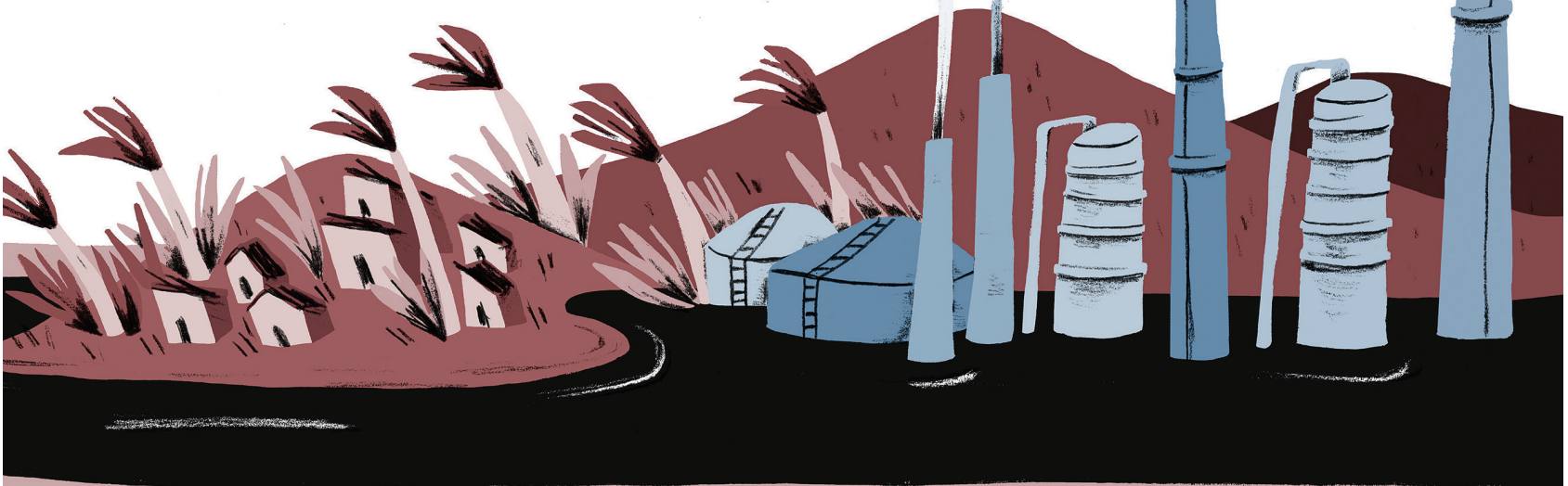
*That summer explosions rattled the neighborhoods around the refinery as black smoke draped the verdant landscape in what looked like sooty cloaks.*

cal slick some 10 feet thick floating on top of the island's only aquifer. At one point, construction workers on the south shore stood back in surprise as a geyser of crude oil shot out of the hole they were digging. They thought they'd hit it big until the dismal reality of the situation became clear: they had tapped into a shockingly large plume of petrochemicals flowing from the refinery. An internal investigation in 2001 revealed 95 percent of waste-stream pipelines were leaking and by 2005 the refinery concluded they were "deteriorated beyond repair."

Yet the refinery continued to operate as if nothing was amiss. By 2010, over one million barrels of oil had been extracted from the plume beneath the plant—an

amount four times the size of the Exxon Valdez spill—yet the remediation of the plume was nowhere in sight. Carcinogenic vapors from petrochemicals are now readily detected in homes and neighborhoods along the south shore of St. Croix. When an EPA official came to St. Croix in 2011 to address the severity of what had been uncovered, they were shouted off the stage by residents furious over decades of quiet neglect.

Beyond corroded infrastructure, investigators also uncovered a history of shoddy practices that routinely sacrificed public health on the altar of operational ease and corporate returns. Workers told me stories of venting benzene under the cover of night on an island where residents still get their drinking water from cisterns, and of flushing mercury down the drain into a bay still popular among local fisherman. Facing potentially record-breaking fines for this liable history of disregard, HOVENSA agreed to settle with the EPA in 2011. The refinery agreed to pay a \$5.3 million dollar fine and in lieu of penalties committed \$700 million to extensive remediation, state-of-the-art pollution controls, and





substantial investments in public health on St. Croix (including a cancer register to investigate residents' worst suspicions). At the time, this settlement was the largest on record for a refinery in the United States.

After finalizing the settlement, HOVENSA shut down and filed for bankruptcy in February 2012. This not only sidestepped its legal obligation to clean up its own mess, it also compelled draconian cuts to the territorial government budget. When the refinery shut its doors, 20 percent of the territory's annual budget disappeared in an instant. The closed refinery had "shaken the foundations" of St. Croix, the governor of the US Virgin Islands said at the time, forcing cuts that were nothing short of "catastrophic." Unemployment soon shot up to nearly 20 percent and energy costs skyrocketed (the refinery had long subsidized electricity and gasoline rates) as the state hemorrhaged governing capacity. Crime rates on St. Croix rose substantially as theft and assault became commonplace (a United Nations report notes the US Virgin Islands now has the fourth highest homicide rate in the world). One year out, the US Virgin Islands labor commissioner testified his surprise that there hadn't been a complete meltdown on St. Croix. "But," he added, "it has only been a year."

Catastrophe built on catastrophe. With St. Croix still in a tailspin, an unprecedented Category 5 hurricane brushed up against St. Croix in 2017, causing considerable damage. Two weeks later, a second Category 5 hurricane slammed directly into St. Croix, leaving nearly every building on the island in tatters and obliterating most public infrastructure. Ninety percent of all electrical transmission lines were destroyed. The back-to-back superstorms inflicted "widespread catastrophic damage," as the National Oceanic and Atmospheric Administration (NOAA) put it, as uninsured damages exceeded \$7 billion. The hurricanes blew away roughly 1 in 10 jobs on the island and hacked an already emaciated public purse in half. Unemployment claims spiked to twice their previous high point: the closure of

the refinery. The territorial government found itself downgraded and beyond bankrupt, unable to secure aid on par with its dire need nor able to renegotiate its debt obligations. Three years on and congressionally allocated funds for recovery remains a fading promise in this Caribbean territory. The plight of St. Croix clarifies exactly what "colonial" means in the present tense.

Over the past two years, the territorial government has facilitated the sale of the refinery with generous tax breaks and promises to absolve the new owners of any responsibility for the legacy of contamination. The ongoing negotiations around restarting the refinery, according to recently disclosed internal EPA emails, "is receiving high visibility inside the beltway" in Washington, DC, and

*The negative ecologies of fossil fuels assail St. Croix from two sides: a catastrophic history of profitable neglect and a catastrophic future of climate instability.*

In 2018, a year after one of the worst hurricane seasons in recorded history, Caribbean nations gathered to discuss climate resilience in the region. Many spoke of weaning themselves off fossil fuels and building green economies. The enthusiasm was clear: the Caribbean was poised to become the premier laboratory for redesigning societies beyond oil. Then the US Virgin Islands stepped on stage. Their plans for climate resiliency pivoted on one idea: restart the refinery. When pushed, officials spoke about the rising challenges and costs that climate change is bringing to the island with storms like Hurricane Irma and Maria. How could the territorial government bear these costs without the refinery? The oil industry may be morally bankrupt and complicit in the coming catastrophe, but who else is still capable of paying the bills?

is being used to showcase wider efforts to remake environmental protections as customer service for corporations. Assisting the new owners with "anything they need," wrote one senior EPA official, offers "a pilot for a broader customer liaison concept" in environmental enforcement. In this, the EPA seems intent on insuring the new owners need not address the built-in flaws in the waste streams nor the petrochemical contamination of the island. Indeed, recent EPA grants appear to use taxpayer funds to supplement the legal obligations of the refinery to install air monitoring equipment. In 2020, the overriding priority of the EPA is restarting one of the largest and dirtiest—indeed, most criminally negligent—oil refineries in the world. The EPA, one senior official wrote, "understands that restarting the operations







at the former HOVENSA site would significantly benefit the economic health and well-being of the US Virgin Islands,” something “especially important for the recovery of the US Virgin Islands in the aftermath of Hurricanes Irma and Maria.” The advice from President Trump’s EPA is clear: to survive the turbulence of climate change we have no choice but to double down on the fiscal promise of oil.




When I visited St. Croix in the summer of 2019, the island still bore the impact of the superstorms. Tattered blue tarps fluttered atop buildings. Many former homes and businesses still lay in a mess of rubble and fallen trees while whole sections of the main towns remain boarded up. Hurricane Maria destroyed 8 of the 13 public schools on St. Croix. Some three years later, reopening them remains a distant event. The sole hospital on the island now operates in patched-together units and temporary modules as the main building stands condemned, its roof leaking and the hallways overtaken with mold. A replacement hospital has been promised for years now, but construction is ever deferred. Medical care has been reduced to triage and basic care. Most everything else is referred to Puerto Rico or Florida. The island continues to lose residents; those who remain wait on promises still receding.

The refinery, however, is abuzz with activity. I watched as piles of equipment twisted and broken in the storm were bulldozed to one side while a man camp has been set up to house the 1,000 workers from Texas and Louisiana tasked with getting the refinery operational again. Locals were promised jobs in the rebuilding project, but so far the only work to be found was providing menial services to the man camp in the evenings and on weekends. No one is entirely certain about the current levels of pollution around the refinery as most of the environmental monitoring equipment stopped working when the hurricane hit.

This past June, local environmental and civic leaders gathered to discuss the urgent necessity of rebuilding St. Croix. One of the aims of this convening was to envision an energy system on St. Croix that was accountable to people and the earth. The organizers asked if I might join them to share my research on the refinery. We came together for two days at the still shuttered Carambola Resort, with tarps stapled on damaged roofs and a beachside pool still full of debris. For many residents, the environmental injustice of the refinery and arrival of new superstorms were not unrelated events. They form a single continuum of fossil fueled disaster, a continuum that had to be broken if there was any chance of rebuilding with real hope. “From HOVENSA to Maria, there has been a plan to keep us down. We got to seek justice together.” “Why should we bear the burden for things others have profited from?” “Rebuilding is not enough, we must reclaim the land.” One preacher offered an even longer history, noting “white supremacy and extractive capitalism are bound up together. They only see black people as something to use up and cast away.”

“Oil sabotaged our island,” a local farmer reflected on the last day, “And now it’s up to us to set things right.” Talking over the present plight for several days, the moment felt both desperate and pregnant with possibility. Again and again, someone would interrupt long pauses in discussions about the immensity of the challenge with the

same refrain: “We need justice.” And justice started with calling the fossil fuel industry to account for both the rampant contamination of the island and its stark vulnerability to the rising storms of planetary instability.

The negative ecologies of fossil fuels assail St. Croix from two sides: a catastrophic history of profitable neglect and a catastrophic future of climate instability. For state agencies and financial investors (and some strains of social theory), the answer to this conundrum is clear: it’s only by turning our backs on the historical present that we can fully face up to the demands of the future. For the state, rebooting the refinery is the last gamble still offering winnings adequate to the great transformation now needed (without, you know, disrupting the neoliberal order of things). But doing so involves a technical baptism to wash the still simmering history of toxic contamination from the official record. Such thinking advances new justification for sub-standard citizenship in places like St. Croix: to best prepare for climate change we must absolve and subsidize the very industry that willingly led us into this crisis. Profits, not people, will save us in the end. Residents are having none of this nonsense. The disasters of toxicity and climate change may have very different temporal and spatial coordinates but they share one liable author: the empire of oil. It is only by holding that empire accountable—by prosecuting the profiteers of destruction—that justice can be found and a society beyond oil begun. A climate crucible. 

**David Bond** teaches anthropology at Bennington College. His work describes the disastrous properties of fossil fuels in North America, paying special attention to how environmental science and policy has become complicit in the destruction while impacted communities pursue a more confrontational politics.

**Emily Thiessen** is an illustrator and climate justice organizer living in Lekwungen Territories/Victoria, BC. She holds an anthropology degree and has a fire for creative troublemaking. You can see her work at [emilythiessen.ca](http://emilythiessen.ca).

