

The Cape Town Water Crisis, White Man-made Climate Change, and the Road to Sharpeville by Euri B. Vidal

It was the year 1912 when John Langalibalele founded the African National Congress (ANC) as a response to the racial policies that the successive South African administrations had imposed on the non-white peoples of the country since the Dutch East India Company began to colonise the region around Cape Town in 1652. In 1948, that political system was wrapped up into one of the most loathsome things humankind has come up with: the apartheid. Twelve years later, on the 21st of March of 1960, the South African police opened fire against a crowd of people who were protesting against the pass laws that forced non-white South Africans to carry passes as a way to segregate them and restrict their movement. Sixty-nine people were killed. In 1996, a free Nelson Mandela walked a different road and chose Sharpeville to sign in the South African Constitution.

Today, South Africa is a solid multiracial democracy not exempt from problems cooked up in the past, in the country or, surprisingly, far away. The mother of South African cities, the first urban centre where the imperial racism of the Dutch Republic had begun three and a half centuries earlier, is under siege, not from its colonial past, but from a changing climate. Cape Town is a place of worldly fusion: a place where the Atlantic Ocean meets the Indian Ocean; where Europe meets sub-Saharan Africa; where the Global North meets the Global South, and the developing city meets the developed city; where the haughty Table Mountain meets the wise Robben Island; where mansions built for white people by black people during apartheid meet the scanty shantytowns of the city's outskirts; where the African savannah briefly becomes the dry Karoo semidesert and meets the Mediterranean climate of Southern Europe, California, and South West Australia; where rains come in the winter only. Except that they no longer do as they used to because of climate change. Cape Town is going through the worst drought in a century, and this, coupled with its dramatic increase in the population of the last few decades has forced the city to impose strict rationing of its water resources. Since the 1st of February, Capetonians can only use 50 litres of water a day, for cooking, showering, and flushing the toilet. That is not very much; fifteen litres allow for a 90-second shower. It is less than the minimum the UN recommends for daily domestic water needs. If the problem continues, the water restrictions will take Capetonians to 'Day Zero', now scheduled for 2019. On that day, the City will turn off the taps and all will have to queue at one of 200 water collection points for a daily allowance of 25 litres per person, an amount that most in developed nations would find unbearable to do with – but that is an unfortunate reality for millions of people in the developing world. 'Day Zero' is also the day when the city has planned to deploy police and the army to protect these 200 collection points.

How long Capetonians can cope with this situation remains to be seen. The city is frantically looking for alternative sources of water, drilling boreholes, and focusing resources on building desalination plants. There might be a widespread opinion that the government could have done more and earlier to deal with water scarcity, and there is always room to do better, but Cape Town's efforts have been remarkable. The city came 1st in the C40 Cities Award in Paris in 2015 for its Water Conservation and Water Demand Management Programme, beating 91 other cities that included Rome, Seoul, Athens, and Auckland. Anyone willing to blame the city and the provincial government ruled by the Democratic Alliance, the country's de facto opposition party, or even the national administration led by Mandela's party, the ANC, or the bickering between the two, could consider blaming *homo sapiens sapiens* instead. There is something that we all need to know about *homo sapiens sapiens*: we will look away from a problem for as long as we physically can.

There is no evidence to suggest that any city in the world is preparing for the kind of drought Cape Town is going through. Other municipalities have managed to get out of severe

drought before. Melbourne worked with similar weather conditions at the beginning of the century and created a better way to conserve water and provide for its citizens. But other than the theoretical ability to cope with water scarcity, Cape Town and Melbourne's have little in common, not least their history. For starters, we don't know when the drought in Cape Town will end and, with fresh water sources dwindling globally as a result of global climate change, a similar crisis is likely to happen again sooner rather than later. Secondly, managing resources better yet is not always easy, especially in a city with many of the characteristics of a developing city. And thirdly, and perhaps more importantly, the people of Cape Town do not live under the same conditions of economic and social stability as those in Melbourne: any city with its water taps shut off would be a test for its citizens but, in the case of Cape Town, the municipality also has to deal with, amongst other things, ranking first in the murder rate in cities on the African continent. Even despite all the advantages that Melbourne has and the measures it has implemented in the last decade, [the city could run out of water by 2028](#). The stress that prolonged and biting water scarcity may inflict on the psyche of the population of Cape Town, potentially make harsh water restrictions a time bomb. Enforcing this sort of control will be financially costly – and it is the sort of measures that the apartheid government also needed to impose towards the end of the regime but eventually could no longer afford to.

Nearly eight decades went by between the year the ANC was founded and Nelson Mandela walked free from captivity. The apartheid came into law in 1948, or halfway through that time and, until the Sharpeville Massacre, the world was not directly concerned about what was going on in South Africa. Mandela was sent to prison in 1964, and the pillars of apartheid only began to crumble inexorably upon his release. That would be another 27 years. We have known about greenhouse gas-induced climate change for seven decades, or nearly as long as the racial laws of South Africa lasted, from 1912 to 1990. The first climate studies were carried out at the end of the 19th Century, but real worry began in the 1950s. The [Keeling Curve](#) that shows the pattern of increase in the amount of carbon dioxide in parts per million in the atmosphere was first published in 1958, sixty years ago. Scientists have been warning since about a looming catastrophe if emissions remained unchecked; the Cape Town water crisis is climate change by the book. We didn't know the exact year or place, but we knew something like this was going to happen somewhere in the world. Regardless of how many measures are in place, including better water management, desalination efforts, drilling boreholes, extracting water from the Table Mountain aquifer and the like, these measures will solve nothing if there is no rain – not to speak of the problem of who will pay for the upgrades. During apartheid, this approach would have been akin to giving some non-whites key posts in the government to appease the population at large.

Capetonians – and humans – are delusional to think this drought is a temporary problem; climate change is only going to get worse, making rainfall more scarce in regions like the Western Cape, and also more unpredictable. We live on a planet with finite resources and a set of environmental conditions and propitious places in which we evolved as a species and in which we developed our civilisations and our cities, but we have been very slow to grow a consciousness about these limitations, not only in South Africa, but globally. We believe that the bounty of the Earth is for us to take and bend to our will, without consequences. It is the results of the relentless use of fossil fuels and depletion of the global ecosystems that climate change scientists started warning us about sixty years ago. Scientists at the [University of Cape Town](#) are saying that this might be a one in a 300-hundred or even a 1000-years event, but according to [NASA](#), the last time the levels of greenhouse gases in the atmosphere were this high was three to five million years ago, when humans were not even remotely around as a species; the concentration of greenhouse gases in the atmosphere during the last Ice Age was less than half of what it is today.

My conveniently wrapped take-away chicken nuggets and bottled water are waiting for me at the ventilated airport terminal for my bliss-imbued weekend in Barcelona. Meanwhile, the black

South African grandmother who lives in a township on the outskirts of the city, who hardly has enough food to eat, and who's never had anywhere else to go, not only during apartheid but now, queues to get water for her daily meal. There is a growing body of evidence that shows that the higher the inequality, the higher the environmental degradation. Who has been using most of the water in Cape Town all along? We have seen this before. We have known about human-caused climate change for a long time. In the Global North, many of our – white – leaders have tried to dodge the problem for nearly as long, and pretend that it was either not happening or that doing something about it would be too expensive and it was not in our interest to change. Sound familiar? Apartheid metastasised under the exact same principles. South African Harvard Medical School Psychologist Susan David says “I grew up in the white suburbs of apartheid South Africa, a country committed to not seeing, to denial. It's denial that makes 50 years of racist legislation possible, while people convince themselves that they are doing nothing wrong.” Pieter Botha, who led the racist government from 1978 to 1989, and who is charged with imprisoning thousands of anti-apartheid activists, many of whom were tortured and killed, turns out to be a good standard-bearer relishing in the inaction of those responsible for the problem: economic wellbeing by whites and for whites in Europe, North America, and the rest of the Global North while poor black South Africans and most people in the developing world scavenge for water. If there was a way for white people to create a system that punishes non-whites around the globe in a worse fashion than apartheid did in South Africa, climate change could easily come first. Paraphrasing David, the world has been committed for sixty years to not seeing. The cheap food, the cheap energy, the cheap transport, the cheap stuff. Sixty years of cheap comforts. It's denial that makes 60 years of the relentless use of fossil fuels possible, while people convince themselves that they are doing nothing wrong. We must remember that many non-white people live in authoritarian states where the army is ever eager to 'take control' and potentially walk down the road to their own Sharpevilles. We in the Global North cannot bring democracy to other parts of the world, but we can phase out the use of fossil fuels and stop giving reasons to the armies of less democratic countries to 'protect' their populations in times of difficulty.

For a long time, it was hard for South Africans to dream of the day apartheid would end. When Literature Nobel Prize winner Nadine Gordimer wrote *Burger's Daughter* in 1979, it seemed it would never end. “World history would indeed be very easy to make if the struggle were taken up only on condition of infallibly favourable chances,” she wrote. Those who fought apartheid did so without the knowledge of what would happen, whether their actions would ever come to anything. For over seven decades, hope took black South Africans to nowhere. And for nearly seven decades, the efforts to tackle the use of fossil fuels are too slow and seem futile, too.

The end of apartheid was complex. After Sharpeville, the boycott of the South African economy began. The United Kingdom, South Africa's largest trading partner at the time, forced South Africa to leave the Commonwealth. In 1962, the United Nations passed resolution 1761 calling for the imposition of sanctions on South Africa. Meanwhile, the apartheid government found it increasingly difficult and expensive to control the non-white population it was oppressing, as a coalition of non-whites and whites gained strength against the government and the country suffered the effects of the actions of the international community. Arguably, the last years of apartheid were the most ruthless. Dozens of people were imprisoned and tortured, including beacon activist and writer Steve Biko. Today, the fossil fuels global industry, at least in the Global South – but that caters mostly for the Global North's hunger for raw materials – is throwing what it has to keeping things as they are while terrorising anyone trying to end the status quo. The Guardian reports 197 people killed last year for defending land, wildlife or natural resources, with many deaths directly linked with the fossil fuels industry.

In the case of greenhouse gas emissions, the Paris Agreement and the friendly attitude between China and the Obama Administration set the basis for what in 2015 would finally be

doing 'the right thing' – only to see Trump elected president of the United States. The 8th of November of 2016 will stay in the memory of many fighting climate change as a huge setback. But we must not forget it is just a setback, and that the movement hasn't died. The question is how many more climate change-related events we are prepared to see happening around the world, how many El Niño abnormal events, how many devastating hurricanes and floods, how many cities like Cape Town running dry. If the drought that is plundering the South African city continues for years or intensifies, parts of the city will almost certainly have to be evacuated – so that it can go to population levels more in line with its changing environment. If the civil unrest gets very serious, more of the city will have to be abandoned. The water crisis is a make or break scenario for Cape Town. A reduced-sized metropolis will not be the vibrant place of fusion that it is today; it might become a scared, self-conscious, and struggling urban centre. Will the Cape Town water crisis yield the first environmental refugees the West cares about? Will they have a greater impact on the minds of Westerners than that which those displaced by floods in Bangladesh, rising sea level in Maldives and Tuvalu, or drought in Chad have had so far? Whether as a global village we can help Cape Town to get through this or not, we do not know at this stage. But we can help to minimise the situation in the long term and aid other places to avoid ending up with 'Zero Days' when the armed forces need to be deployed to 'protect' the safety of the people queuing for water – or perhaps relocating to higher ground.

I remember as a 17-year-old visiting the Robben Island Museum during my secondary school holiday in Swaziland. The tour bus takes visitors around the limestone quarry where Mandela and other inmates spent endless hours shovelling rocks under infamous conditions to pave the island's roads. In the middle of the open space of the quarry, there is now a pile of stones that the late South African president and fellow political prisoners laid during a reunion in 1995. After that, and until well past the end of the tour, I found myself deeply moved and crying at times. It was the realisation that as human beings, we are capable of doing horrific things – but we are also capable of bringing an end to the madness.

Around the time Desmond Tutu won the Peace Nobel Prize in 1983, the anti-apartheid movement was gathering momentum. Mass demonstrations and strikes were taking place all over the country. Whites-only schools began accepting non-white students, and non-whites showed up at whites-only hospitals. There were international sanctions, divestment, and cultural and sports boycotts. American theologian Walter Wink wrote in 1987 in *Violence and Nonviolence in South Africa* that the anti-apartheid movement was “the largest grassroots eruption of diverse nonviolent strategies in a single struggle in human history.” It would take seven more years for Mandela to be released. For the first time since those two Dutch seamen were shipwrecked near the Cape three and a half centuries before, a non-racial South Africa was becoming a reality; by the time the 80s were coming to an end, the anti-apartheid movement was invincible. The global effort against the continuous use of fossil fuels has a lot to admire about what happened in South Africa before Nelson Mandela signed the South African Constitution in the town of Sharpeville on December 10th 1996.

The longer we wait, the longer we wait to stop using the coal that was first extracted from Scottish mines to power the Industrial Revolution three centuries ago, as well as the other fossil fuels that came afterwards, the more likely it is that Cape Town and other drought-stricken cities around the world will fail to cope. It is time. As with apartheid, it is time to send fossil fuels to a museum, where they both belong. Cape Town might be the unlucky earlier outlier, but many cities are on the line regarding water resources. These are places such as Melbourne, Jakarta, or San Diego, but other cities too are on the line regarding other climate change-induced scenarios like sea-level rise, such as London and New York. Some people deny that human activities are the cause of climate change – those seldom ever trained as climate change [scientists](#) –, and there are also those who thought that apartheid was a gift from God, as those in the Dutch Reformed

Church, the church of the regime, must have. Many places are on the line, but we can help some, if not all. New York recently announced it would divest \$5 billion from fossil fuels and sue oil companies, fearing what sea level rise will do to the city. It is during situations of stress, like the prolonged need to queue to collect water or the need to escape from floods, that send a few of those presumably responsible for enforcing the public order to act outside the realm of common sense, and they are always the ones who shoot. How long are we willing to wait and see, before we do the right thing and prevent another Sharpeville Massacre? Everything we do, everything we do on our own, and even more so everything we do as part of a collective to stop using fossil fuels and restore the world's ecosystems, can prevent one more place in the 21st Century from having to deploy its army, fire the shots, and force people to walk down the road like on that 21st of March of 1960 in Sharpeville.

The world has certainly more than enough with one Sharpeville Massacre. And yet, there have always been two roads to Sharpeville: the one walked down before that 21st of March of 1960 and the road walked after that. The world should not wait to see people killing each other at water collection points to act, South Africans least of all. If Capetonians make of this crisis an exclusively 'adaptation' event, the water problem will stay. Adapting to climate change means creating the circumstances to cope with the effects of a different, more problematic climate, as the city is doing at the moment, which includes drilling both public and private boreholes and building desalination plants. Adaptation also includes extracting water from the Table Mountain aquifer, a unique ecosystem. But how long will that water last? One year? Perhaps two? And then? Back to square one? Focusing all efforts on adaptation alone will do nothing to solve the problem in the long and even the medium terms. Cape Town could work on a two-tier front instead: focus on the immediate adaptation efforts the city needs to provide water to its citizens, but at the same time, focus on mitigation too. Mitigation means tackling the problem at its source – halting the use of fossil fuels to stop greenhouse gases entering the atmosphere and modifying the global climate of the planet – that affects different regional climates differently.

Phasing out fossil fuels is going to be really, really hard. But so was getting rid of apartheid, and there is probably not a single person who lived under the yoke of its injustice that misses it. For those who do not mind the use of fossil fuels because they think they are not affected, they are wrong. Everything, from the fresh water we drink to the food we buy, to the clean air we breathe, will become scarcer if we continue using coal, oil, and natural gas to power the global economy; and we know that when things become scarcer, they also become more expensive and thus available to fewer people.

The clock is ticking. There is not much time for Capetonians to do something to have a significant impact on the source of the problem – climate change. South Africans must not look around for leadership elsewhere in the world – there isn't any. The world is preparing for climate change just as Capetonians have been preparing for a 300-year and even a 1000-year drought event for the past two years; that is, not very significantly. Capetonians are going to have to lead. If they want it done, they are going to have to do it themselves. Capetonians could perhaps take the wisdom of Robben Island to Table Mountain, pause and sit for some reflection – any of the hikes up are every bit their worth – and make of this a 'pride affair'.

Cape Town is Africa's 11th largest city, and it is well within the one hundred largest urban dwellings in the world. Cape Town is South Africa's second largest city, and South Africa is a country of nearly 60 million people, also one of the world's four largest emerging economies. South Africa is also the 15th most polluting countries globally, with greenhouse gas emissions higher than those of the United Kingdom (though with 10 million fewer inhabitants and not fully industrialised). There is much Cape Town can do to affect what the rest of the world does if it were bold enough. Coal, a fossil fuel, powers about three-quarters of the energy consumed in the

country. Because of its chemical composition, South African coal also happens to be dirtier than the world's average, therefore producing more greenhouse gases. I am hoping that the struggle against apartheid made South Africans more apt to look into the face of their contribution to problems of the size of climate change for the good of humankind. South Africa does not need its coal mines; it never has, and it never will, just as with apartheid – they are both a white man's tale. The mines arguably don't pay their fair share of royalties to the nation. The mines are bad for the health of the people who work in them; they are perverse like apartheid, being responsible for thousands of lives and many more injuries of mostly low-paid black workers. The mines are bad for the people who live near them, as they pollute water and farmland. And the coal that is extracted powers South Africa's other mineral mines, that are as horrible. The Marikana Massacre that took the lives of 17 people in 2012 happened at a platinum mine under the country's democratic government. What South Africans might consider is the relative wealth the mines bring (especially to the few) as opposed to the human cost and the economic costs attached to it. The coal mines should be long gone. They belong to the same museum in Northern Park Way with Gold Reef Road, Johannesburg, where apartheid is buried. South Africa's current fossil fuel-intensive energy policies are heavily influenced by ESKOM, South Africa's national energy utility in charge of the mines and most of the country's electricity provision. ESKOM was founded in 1922. It is an apartheid dinosaur, or the white elephant in the room if you will, and South Africans should have sent it packing in 1996, right from Sharpeville. If South Africa decided to shut the coal mines in extremis, it would send an unequivocal message to the world that the end of the fossil fuels era is nigh. South Africans have a moral responsibility to shut down all the coal mines, now more than ever; a signal like that might join many to disinvest from fossil fuels, just as the world disinvested from the South African economy of apartheid to support a change of regime.

It would be understandable to think that phasing out fossil fuels will not help Cape Town, already at razor edge of a global climate disaster. But once the floodgates open, there might be no turning back - the world could phase them out quickly too and enter an era of restoration of the global ecosystems to reverse some if not all of the current effects of climate change – that follows a stern, coordinated, and sufficiently bold global effort. Perhaps South Africans can begin this necessary step and later join forces with a future American president more in tune with science and the natural world, someone mindful of the energy of America to see the valleys, and the rivers, and the lakes, and the mountains, and the willpower that people had to explore all, see all, and try all in the new land that the new nation was discovering when the founders were building it. I hear the African diaspora did some good for America – as well as the wider world – between 2008 and 2016. William Wilberforce led the movement that took the British Parliament to pass the Slavery Abolition Act to abolish slavery in the British Empire in 1833. Sometimes all it takes to change the world is one law; sometimes all it takes to turn a country around is a document with 14 chapters and 244 sections, as has done the South African Constitution since 1996.

South Africa is a beautiful country, and it is arguably one of the most beautiful countries in the world. South Africa has all the natural resources that are also clean to power its economy and create a better nation that pushes the world in the right direction. The country has excellent sun conditions for producing solar energy. Coal is very abundant in South Africa – the country being the 7th largest producer in the world – but still not as abundant as sunlight, which also happens to be available in more places; on a small scale, it can be garnered anywhere. Much of South Africa receives more than 6,000 MJ/m² per annum of solar radiation that is necessary to exploit the technology adequately on a large scale. Moreover, the South African coastline is also adequate for the development of wind energy. Large stretches of the coastline of the Western Cape, in particular, receive wind that exceeds the 4 meters per second speed required to garner wind power. In Cape Town, people call it 'The Cape Doctor' because it takes the city's pollution away. But

why not taking greenhouse gases away, too? The landlocked region of Navarre in northern Spain, a successful regional economy, built its first wind turbine in 1994 on the hills of *El Perdón* ('Forgiveness') that millions of pilgrims have crossed through the ages on their spiritual journey to visit the tomb of the apostle St. James in Santiago de Compostela. Thirteen years later, Navarre became the first region in the world to produce 70% of its electricity needs from wind energy, pushing Spain to become the world's second largest producer of wind power. Navarre also has Spain's third largest regional GDP per person for a total of 17 regions. The rating agency Standard and Poor's ranked Navarre as having the highest standard of living in Spain for that year. So much for those who think that renewable energy empties a government's coffers. Renewable energy also produces twenty times more jobs* than fossil fuels in South Africa, it is cheaper to produce than coal, and it also needs less water; coal mines, even the more modern ones, use fresh water for the extraction of coal. It is a fact that South Africans could bring more often to the attention of Cyril Ramaphosa, South Africa's new president as of February 15, who is also a businessman and a billionaire. By giving him a wider picture of an employment-rich, natural resource-efficient, more equal, wealthier South Africa, perhaps he could be persuaded to turn around the country's energy base. Without a single significant coal mine located in the Western Cape, the province is therefore also missing an opportunity to develop the renewable energy sector and increase its revenue. Cape Town is also home to Africa's best university. The marriage between adequate geographical conditions and know-how is where the potential for the city to become a continental and even a world hub to innovate and develop these technologies is. These actions would also push ESKOM a little closer to the apartheid Museum, where it could boast a whole pavilion of its own; everything we do contributes to making the movement to phase out the use of fossil fuels invincible.

The agricultural sector could well benefit from that extra amount of water to expand its activities in the Western Cape, instead of contracting as it is happening at the moment with the drought. The province produces over half of South Africa's food exports. The sector could turn all waste into biomass, biogas, and biofuels to power parts of the province's economy. Biomass is also more labour intensive than fossil fuels. And working with the land can extend to the city itself, too. As Capetonians take care of every drop of water, they could also use every bit of organic matter they produce from food to feed a sea of urban gardens. South African Literature Nobel Prize J. M. Coetzee wrote the story of a fictional but very talented and even more determined Capetonian gardener and agricultor in *Life and Times of Michael K.*— good inspirational reading. Cape Town could, in fact, become the world's first prosperous garden city, pulling significant amounts of carbon dioxide from the air but also avoiding emissions from the need to transport the food. People could also use gardens in the townships to grow food that they could not have afforded to buy in shops anyway and, if the city were ambitious enough, it could help these people become entrepreneurs. Gardens would increase community participation and strengthen them, and gardens would also be a source of education for children. In this way, city gardens would also decrease some of that inequality that South Africa is globally known for. Cape Town could even become the first city in the world to export food on a 'small-industrial' scale (at least to other places in South Africa, via electric vehicles, of course), township-wise.

Planting other types of gardens all over the city would also help to trap more water after rains and reduce the evaporation that would have been lost to the increased heat of late. It isn't lawns I am talking about. Lawns belong to the golf courses of Scotland. South Africa is not Scotland, and will never be, especially not under the current rains regime. Leave the wonderful Scottish things to Scotland and do your own. A more appropriate plant to grow in Cape Town would be the local water-saver fynbos. Many species are endemic to the area, and environmentalists have been reporting that since the water crisis began the city has allowed previously protected areas to be developed for water technology projects like boreholes. That means some species that grew in only small areas are now in danger – if not completely gone

almost overnight. Planting different kinds of fynbos around the city could bring awareness about both the problem and the importance of protecting the Cape Town flora – one of the things that makes the city a unique place for visitors. People all over the city have been coming up with [ideas](#) on how to save water, and this innovative approach could extend to other areas. Botanists at the University of Cape Town could, with the help of app developers, design a map where different types of fynbos could grow in people's gardens and new places the city could establish, such as roof gardens, a growing global trend. Some studies also show that community gardens, and the general contact with nature, contribute to improving people's mental health. The stress that the water crisis is causing to Capetonians will only bring to the spot mental illness more and more. And if Capetonians can save water, why not act when it comes to saving energy at home too? The advantage of saving energy is that people can also save money. Also, some people might be able to install solar panels and small wind turbines either at their home or as part of neighbours' energy cooperatives – and potentially extend the grid to those who cannot afford electricity. That would help to replace the use of paraffin – another fossil fuel – in poor households, whose smoke is bad for people's health. Tshepo Motsepe, Ramaphosa's wife, a medical doctor, understands people's health, including what the human body might go through without enough daily water and the conditions for disease to spread faster; this will happen for the remaining of the century in South Africa – unless something is done, and quickly. Mrs. Motsepe can see the health benefits that a clean economy based on the use of renewable energy, that also takes the country's nature into the city, will bring to South Africans, especially to poorer – and mostly black – people.

And Cape Town will need to continue saving water. Saving water will not tackle the problem at the source, but it will help to alleviate it. People in Cape Town can also make sure that everyone will get what they need. Capetonians could commit to helping those who cannot collect water should Day Zero come, and even those who cannot collect water now. Young, able-bodied people could take water to those in need. If someone has not come up with it yet, an app to put in touch people with can carry water with those who cannot, could be developed — this is probably a good time to do so. Volunteers could give one hour of their time a day or a week. People who have good organisational skills and are clever enough to use less than 50 or even 25 litres of water a day could also donate the excess amount to those who might need more due to illness, for example. Many people wouldn't want to get involved, but many people would, and they might be enough. It would help to bring people together in a time of severe crisis instead of driving them further apart.

This radical adaptation-mitigation strategy would, for starters, be a good opportunity for the wealthy and the affluent who usually enjoy more than enough water to do something historically significant for those who have lived on less than 50 litres a day for their whole lives, instead of giving them the usual excuses and handouts. Another step towards equality. Secondly, the obvious advantage of being radical in this area is publicity for the right reasons. More cities and countries would see how it can be done in Cape Town and would find it easier to understand what they can do, buying time now, and eventually paving the way to the phasing out of fossil fuels globally. Publicity might also attract tourism, investment, and a skilled labour force, three things that the government of the Western Cape has a preference for (they have given away themselves over the years). The Cape Town water crisis is only the beginning. In the Paris Agreement, nations agreed to limit the average increase in global temperatures by 2 degrees Celsius compared to pre-industrial levels. So far, an increase of 0.8 degrees has already taken place, and look at the consequences. By the time humans reach the 2 degrees mark, many cities like Cape Town will be long gone. It will always be the disenfranchised who will pay for the effects of climate change. It will always be those on the line, the people living in the townships of the cities and also those in the rural lands of Africa and the rest of the developing nations. They will pay for the excesses of the world, which are in most cases the excesses of white people and, at least since 1996, also the excesses of many black people in South Africa. Capetonians live close enough to this reality to see,

and in some ways, that is as much of a burden as it is a gift.

Capetonians, you must know your place in the world, and your place in history. Know your roots. Know your fusion. Know that you are from the place where the Atlantic Ocean meets the Indian Ocean; where Europe meets sub-Saharan Africa; where the Global North meets the Global South, and the developing city meets the developed city; where the haughty Table Mountain meets the wise Robben Island; and yes, where blacks meet whites probably most obviously than anywhere else in the world, which is also where the wonder and the relentless beauty of the Rainbow Nation has always lived; where the African savannah briefly becomes the Karoo semidesert and meets the Mediterranean climate of Southern Europe, California, and South West Australia; where the rains come in the winter. But at least they will come.

Water is everything that every place in this planet is, and will ever be - and thanks to this liquid, this is also the most beautiful planet in the known universe; we can't use most of it, so all the more reason to do everything we can to protect the small part that is fresh enough for us to grow food and to drink.

Capetonians can help the rest of South Africa to phase out the use of fossil fuels and flex its moral muscle unto the world. Four million people live in the city and if they work together, they could change the world. Forever. Vanilla complaining is not going to get anyone anywhere. Climate change is a global crisis and Capetonians, you are already paying for it. This is only the beginning. You are going to need some serious anti-apartheid grit. Amongst the world's peoples, you might be the best prepared to do something about it, though. Don't accept a changing climate with longer summers and drier winters as the new normal; the *new normal* is the fashionable term that the global press is using to refer to the Cape Town water crisis, with the understanding that people get accustomed and get over it. Don't accept this new normal in the same way that you didn't accept the laws that came out of 1948 as the new normal, expecting non-whites to get accustomed to them and *get over it*. Don't blow the only chance that you have. Remember the strength that powered the South African nation away from apartheid and saw Nelson Mandela elected president in 1994. Let this be the dream that becomes a fact once again: let this be the road of the 10th of December of 1996. It is not for nothing that South Africans managed to produce the best constitution in the world, signed on that day in Sharpeville. It was a new world, and who misses the old world? South Africans, you can bring good news to humankind. You know how. If you are quick enough – and you can if you have the will – one day, we can only hope sooner than we might think, the people of Cape Town will be able to pull through and say, “We have seen it all”.

**Greentech. Tracking renewable energy and energy efficiency technology innovations relevant to the Western Cape of South Africa*

BIO

I have written this article out of anger, frustration, despair, curiosity, hope. Love. My interest in Cape Town and in South Africa goes back to my time at Waterford Kamhlaba, Swaziland, where I went to study the International Baccalaureate (IB) at the age of 16. The school was opened in 1964 by anti-apartheid activists as a non-racial alternative educational system to that of the apartheid. Waterford is today a member of the United World Colleges, of which Nelson Mandela is Honorary President. I wrote my IB dissertation on the economy of apartheid. I had the opportunity to live in Cape Town for the first time in 2006 as an exchange student from the University of East Anglia in Norwich. During my stay in Cape Town, I volunteered for two projects in the township of Khayelitsha. One was 'HIV/AIDS Education', and the other one was 'Environmental Awareness'. I returned to the city in 2010 to work as a junior consultant for Econologic, a small consultancy where I contributed to the paper *Greentech: Tracking renewable energy and energy efficiency technology innovations relevant to the Western Cape of South Africa*. The paper served to advise the Department of Economic Development and Tourism of the provincial government of the Western Cape in its renewable energy and energy efficiency strategy. The more technical aspects of this article are a reflection of that work. I had first visited the city at the age of 17 after a 17-hour coach journey from Namibia when on holidays from school in Swaziland.

I currently work for The Surefoot Effect, a Scottish social enterprise that focuses on climate change education through programmes such as Climate Conversations, Climate Justice, and two EU-funded projects, 'Environmental Learning Illustrated' and '[A Tale of Two Futures](#)'. These two projects aim at inspiring people to start energy and resource-saving initiatives by looking at the stories of those who are already developing similar undertakings around the world.



El Alto del Perdón, Pamplona, Spain.