



However detached the current global economic condition has rendered us from our life-giving resources, we are more than ever affected by the consequences of our extraction policies and processes in the management of our finite resources. At the threshold of climate collapse, ecological annihilation and human extinction – living creatures are still treated as commodities, ecosystems depleted and limited resources perceived as infinite.

Is it possible to transition to a Co2 neutral economy while enforcing existing energy extraction practices? **countrycide** claims the current direction of the Norwegian nation state is both a threat to its democracy, culture and ecology. Continuing climate threatening industries, colonial land “development” and capitalist exploitation; the Norwegian state is not only ecocidal but also suicidal.

If the nation state sincerely wishes to make a commitment to halt global climate change, it needs to abolish its neoliberal capitalist ideology and recognise and confront its colonial past and present. The underlying anthropocentric worldview must give way to one valuing the non-human. Colonial resource extraction has to stop, and we have to treat humans, non-humans and ecosystems with care and empathy. Leveraging its strong international image and financial power, Norway has a unique opportunity and obligation to lead by example.

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Outdoor shower

In 2008 my parents inherited my grandparents' cabin in Bergsvik, a small patch of land at the end of a glacial valley facing the Høgsfjord about halfway between the villages Jørpeland and Forsand. The cabin was built by my grandfather in the seventies together with a few crafty friends, on a challenging part of a farmhouse garden affectionately named "steinrøysa" meaning pile of rocks. The property, whilst situated on partly sloping, rocky terrain, featured majestic trees and a great view across the fjord towards the city and the north sea beyond it.

A very modest construction of partly reclaimed timber on a stone foundation and with no water or sewage, the cabin still met all of the family's needs with two sets of bunk beds and a (small) double bed, a wood burning stove, a fridge and kitchen. Water could be found in the stream running past the property and a water hose connected to the farm's shallow well was installed in the garden. Defecating activities were confined to a small triangular shed at the northwest corner of the property. As the family grew and aged the house was expanded with a living room with a large window facing the sea, as well as an annex/toolshed and a more sophisticated toilet shed. The creature comforts gradually increased over time, but the cabin remained a facilitator for an outdoors-lifestyle and refused to become too comfortable. When he was there my grandfather was constantly upgrading and adding to the buildings as well as doing comprehensive landscaping, all in his free time, as a way to "disconnect" from his job as an electric engineer working for the local energy company on large infrastructure projects. When he passed away he left a significant collection of buildings on an incredible piece of land; The farmhouse with the addition of a woodshed and a toolshed with a small carport, the cabin with its annex and toolshed/toilet, a bridge allowing people and grassing sheep to cross the stream down by the sea and a boathouse with two piers built together and shared with some of the neighbours. His final project, completed two years before his passing in 2007, was an expansion of the stream by the farmhouse – creating a shallow pool complete with its own manually adjustable dam. His own miniature version of the massive hydroelectric dams from his work – this one on a manageable, human scale.

In 2013 my dad along with his architect friend Torgeir Norheim started renovating the cabin. The idea was to make it meet our modern standards of comfort whilst respecting the history and original design of the cabin and place which the extended family has grown so fond of over the years. The plan was altered to allow for a modern bathroom and a slightly larger bedroom, while the two children's rooms with bunk beds remained intact. The exterior and interior cladding was replaced, and the wooden structure repaired where necessary. A modern kitchen was added, and nearly all of the interior replaced. Simple traditional wooden dining chairs were replaced by danish designer wooden dining chairs. The roofs of the cabin and the annex were replaced as well, although the annex and toolshed remained untouched otherwise. The old toilet and septic tank were removed and replaced with a modern toilet, now connected to an independent self-cleaning sewage system, with water coming from a new well. Huge granite slabs were brought in to level the sloping part of the garden, creating a parking space for two cars and a terrace catching the morning sun. Facing the road, a taller perimeter fence was built to reduce the intrusion of passing cars. Finally, on the wall outside the modern toilet shed, an outdoor shower was installed.

Few things come close to the sensation of a hot shower in the crisp morning air after a run to the nearby Idse island and a dip in the cold, salty sea. As the water runs down your back you hear the trees rustling in the wind. Peering across the landscape your eyes meet those of grazing sheep, but their gaze doesn't intrude behind the 1,5 meter tall privacy screen. With your back to the shower head you see past the cabin through diverse vegetation, past the old house the farmer rents out to German tourists each year and the mustard yellow horse stable behind it, a Norwegian flag pennant waving amongst the tree tops on the peninsula through which you spot the bright orange north sea barges stored at the old boat builder's yard, straight across the Høgsfjord where ferries journey between Stavanger and the popular Lysefjord, up the densely wooded hillside and to the larger mountain beyond it where your eyes finally rest at the ridge, still covered by the morning fog. But something's changed. As the mist clears a giant needle appears to be piercing the crest of the mountain. More appear besides it, like masts of a giant ship with spinning blades on top. How tall could they be? 100m? 200m? Their presence disturbs the scale of the vast landscape, subduing the previously wild mountain. Untouched since the last ice age. The hot water turns cold as your pattern recognition capabilities provide you with a reasonable answer. Wind turbines.¹

¹ The Norwegian Water Resources and Energy Directorate (NVE) granted concession to Vardafjellet wind farm on December 12th 2014, confirmed by the Ministry of Petroleum and Energy (OED) on March 23rd 2017. The decision was appealed by a multiplicity of concerned parties including neighbours, municipal and regional government, military and aviation institutions, nature and wildlife interest groups and wind power opposition groups. Among their concerns were the sound levels of wind turbines and their effects on nearby residents, irreversible changes to the natural landscape and damage to cultural memories, effects on the extinction threatened Hubro owl, destruction of natural recreational areas and limiting possibilities for future settlements in the area. Appeals were also made concerning changes to turbine type and size after the original concession without new impact assessments made. All appeals and complaints were denied by NVE and OED and construction started in spring 2019. Vardafjellet Vindkraft AS is owned by Nordisk Vindkraft again owned by Renewable Energy Systems LTD (RES group) a global company operating in 10 countries.

Sacrificing ecology for the climate

Norway has seen extreme economic growth over a relatively short time span. In the space of three generations the Scandinavian country has gone from a collection of rural communities spread along the vast and remote landscape with primary industries focused on natural resources – fish, agriculture and timber – to a fossil economy based around urban centres. Centralisation is both a political decision² in the transition of government funds from rural to urban communities and a ‘natural’ consequence of capital and its required labor power. As David Harvey explains, capitalist commodity production has a spatial logic of centralisation³. The high demand for manual labor in and around oil platforms in the north sea attracted labor power to the oil capital Stavanger, away from surrounding districts and other occupations. The discovery of oil in the north sea in the late sixties accelerated modern industrialisation and cemented the nation as a fossil economy⁴. The fossil fuel extracted and the wealth created by it has drastically altered the lifestyle of Norwegians, creating a ‘carbon lock-in’ where daily life is conditioned by CO₂ (carbon dioxide) intensive consumption, regardless of individual choice. In the transition from living from and on the land by managing other life forms and ecosystems, to extracting fossil fuel from the ocean floor for profit, a divorce of actual value from abstract value and natural from abstract space has occurred.

The natural landscape has remained central to life in Norway throughout history as a space of production, consumption, recreation and inspiration⁵. Native populations were nomadic and thread lightly in the landscape, following the cycle of the seasons with the pastoral herding practices which are still maintained today. Early settlers modified land for greater crop yields by draining bogland and clearing forests, and forestry itself became one of the country’s most important industries. With innovation in agriculture fertile land grew in area and productivity, at the expense of biodiversity. With Industrialisation came great acceleration of consumption, and a need to extract ever greater quantities of capital from nature, increasingly disconnected from natural cycles. Industry’s need for electric power led to hydroelectric dams – great interventions in nature on the scale of terraforming. The fossil fuel industry and the endless release of CO₂ into the atmosphere has produced climate change, intervention in nature on a planetary scale. With energy and resource extraction, nature is reduced solely to a space of extraction/production and perceives as raw material to be processed for capital production. Capital devours the natural landscape and threatens the life inhabiting it. In Norway, the combination of state power and free-market energy extraction has provided

² The County Reform and Municipality reform (2017) from the current administration aimed to reduce regional spending by joining and centralising districts

³ David Harvey, *The limits to capital*, London, 1999

⁴ Statistics Norway (2007, April 17) Sentralisering - årsaker, virkninger og politikk. Retrieved from <https://www.ssb.no/offentlig-sektor/artikler-og-publikasjoner/sentralisering-aarsaker-virkninger-og-politikk>, 2007

⁵ Artistic movements have been inspired by the natural landscape, most notably Romantic Nationalism and Naturalism. The Painter Kitty Kielland from Stavanger is known for her atmospheric landscape interpretations, and painted “Peat bog” (Torvmyr) in 1880. The flat landscapes of Jæren in Rogaland inspired Kielland, who’s favourite motifs were the areas’ peat bogs, previously harvested for fuel or drained to the benefit of agriculture, now relevant for its carbon sequestering qualities.

great social welfare⁶, but has also provided the oil industry with enormous protection, increasingly visible in the states unwillingness to stop oil extraction in the face of climate change and widespread protest. Similarly the state's involvement in 'the green shift' has proven a near impossible combatant for opposing people, communities and municipalities.

The green shift is a term used to describe the transition from fossil fuel to renewable energy-based business. According to the Confederation of Norwegian Enterprise (NHO) the green shift is a process of change in society that is about increasing wealth creation with less overall environmental impact and significantly lower climate emissions. The blanket term is used to describe any business or industry that is not directly involved in the emission of greenhouse gases, and effectively removes nuance. More greenwashing than environmental action, the premise of the green shift is that new technology, not reduced consumption, will save us. The green shift also pushes investment into "green" industry as the only action countering climate change, and supposes continued economic growth as the solution, pushing de-growth or environmental protection out of the discussion.

Majority state-owned oil company Equinor (formerly known as Statoil) has announced its "ambition is to reach net-zero emissions by 2050" and reach "carbon neutral operations" by 2030⁷. However promising these 'ambitions' are, they remain vague and refrain from committing to end fossil fuel extraction in Norway or any of the other countries the global company operates in. General consensus is that CO₂ output has to be reduced, as long as it doesn't interfere with the extraction of oil and gas. Fossil fuel extraction and consumption does have to be reduced as well, but not our fossil fuels. It is the larger producers (China is often mentioned) that has to decrease their combustion. Ours is too insignificant in volume in comparison and besides it is the cleanest oil in the world. According to Equinor, Norwegian natural gas (methane) is actually good for the environment because it substitutes coal in Germany⁸.

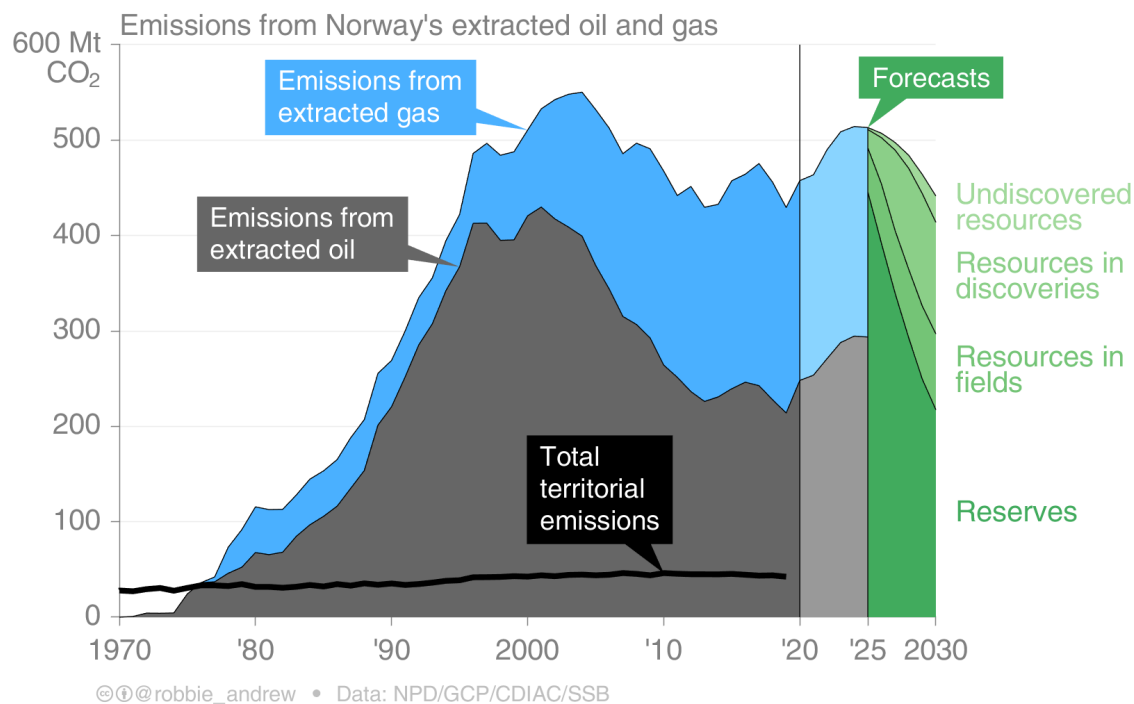
Current state-backed efforts to combat climate change are limited to electrification of oil platforms, large scale construction of wind farms and carbon-capture and storage. Common for all of these is a wish to continue large scale energy extraction and export to keep up revenues. The de-carbonisation of the energy economy continues business as usual but emits less direct CO₂. One of these efforts, the constructions of on-shore wind "parks" enabled by government subsidies, is already proving to be problematic by generating massive resistance from the public. The state's initial response has been to remove and ignore protesters, while repeating the phrase "the advantages are greater than the disadvantages". Ecology has to be sacrificed for the climate because energy production and the profits from it has to increase, following the oil industry in producing energy for profit rather than use-value and pursuing endless economic growth. In the Paris climate accord (2018) Norway is committing to reducing CO₂ output 50% by 2030, but only in domestic emissions. The oil industry is miraculously left out of the equation as the oil extracted in Norway by semi-public and private companies is

⁶ The Government Pension fund of Norway, built on the revenue of the oil industry, reached a value of 10 000 billion NOK (950 billion euro) in 2019.

⁷Equinor's ambition is to reach net-zero emissions by 2050 (2020 November 26) Retrieved from <https://www.equinor.com/en/how-and-why/climate.html>

⁸Can gas actually be good for the environment? (2020) Retrieved from <https://www.equinor.com/en/magazine/can-gas-be-good-for-the-environment.html>

exported and combusted – thereby releasing emissions – elsewhere. The graph produced by Robbie Andrew at the Centre for International Climate Research shows the vast gap between territorial and total emissions from Norwegian fossil fuels⁹. Norway's territorial emissions of CO₂ were about 42 Mt (megaton) in 2019, and over 1971–2019 totalled about 1.9 Gt (gigaton). In comparison, emissions from Norwegian oil and gas since 1971 have been about 16 Gt.



The focus on domestic emissions while ignoring the much greater contribution to global emissions gravely contradicts the call for ‘climate action’ and treaties like the Paris agreement, which in its essence is a pledge to reduce global CO₂ emission to halt global warming before it is too late. In addition to ‘sacrificing ecology for the climate’ the Norwegian state is also sacrificing climate for profit.

Environmental protection has a long history in Norway and can largely be attributed to the philosopher Arne Næss who spearheaded the Norwegian ecology movement and coined the term deep ecology – the view that all life on earth has its own non-comparable value and that everything is interconnected. In contrast, current environmental discourse in Norway is dominated by techno-environmentalists who’s sole focus is the climate. The traditional environmentalists focusing on preserving waterways, forests and endangered species are perceived as a minority. For techno-environmentalists the top priority is to save the human species. Problems can be solved with new technology and resource use, and economic growth can continue at the current rate. The ideology’s isolated view on the climate allows other ecological or environmental threats to be ignored.

Sacrificing ecology for the climate is a curious paradox reflecting the hypocrisy of the nation state producing the worlds ‘cleanest’ oil. Common amongst these new industrial

⁹ Andrew, R. (2021, January 15) Norway’s Emissions Export. Retrieved from https://folk.universitetetioslo.no/roberan/t/export_emissions.shtml

endeavours, undertaken by international corporations fuelled by state capital, is the need for ecological destruction in order to “save the climate”. The call for action on climate change is effectively co-opted by the Norwegian government, and the threat of environmental catastrophe and ecological devastation is used to justify new industrial endeavours that destroy ecology while producing ‘clean energy’ and furthering dispossession of rural and indigenous communities. Individuals, groups and municipalities protesting the destruction of the natural landscape fundamental to their existence are branded as egoistic or failing to see the big picture. In The least of all possible evils, Eyal Weizman discusses how the preemptive logic of the “lesser evil” is often invoked to justify the use of a lesser violence to prevent a supposedly greater, projected one. The concept of proportionality in contemporary warfare and the use of mathematical formulas calculating an acceptable number of civilian deaths show how “the moderation of violence is part of the very logic of violence.” While rural Norway by no means reflects the violent occupation of Palestine, the dispossession of Samí land by the Nation state does follow the same colonial logic; “It is through the use of the lesser evil that societies that see themselves as democratic can maintain regimes of occupation and Neo-colonialism.”¹⁰

The road cut through, divided and mutilated the mountain body, which used to be whole. Nothing but wounds, aching and pain could come from it.” ... “It was as if the wheels of the foreign world had rolled over her own life, and the mountain blood in her wailed over such a meaningless murder.

Lilian Bye, Finner I Finnmark, 1939

Breaking and entering

As I turn off the main road the silence is broken by the sound of the tires hitting the gravel. I ease off the accelerator pedal and the car comes to a full stop. In front of me is a sign reading “Goods delivery Vardafjellet” and under it a makeshift paper sign with a Vestas logo and an arrow pointing to the right. I follow the arrow. Next is a road sign signalling no thoroughfare with another sign reading “access for properties only” under it. On a utility pole besides them a neon yellow sign offers an even clearer message; “Here Vardafjell Wind farm is being built. No unauthorised access.” No one is around so I continue up the newly paved asphalt road. I stop for a moment outside one of the properties. A farm house with a large barn, and a few smaller houses around it. The wind turbines on the mountain behind them seem awfully close to the houses. I wonder how much they were paid in compensation. Past the farm a new wide gravel road follows the perimeter of a grass field, leading to the foot of the mountain where a new boundary is marked by a cattle grid and big fences covered in more signs. I stop again to read.

¹⁰ Weizman, E. The Least of All Possible Evils: Humanitarian Violence from Arendt to Gaza. 2011. p.9

Vardefjellet wind farm. **EVERY ACCIDENT IS PREVENTABLE!** Safety signs and procedures must be observed and personal protection and safety equipment must be worn at all times. Follow the rules for handling hazardous materials. Please walk quietly and calmly on site, and look out for pitfalls. Never start up a unit before checking the earthing/grounding connection. Never stand under suspended loads! Alcohol and drugs are prohibited on site and inside all site buildings. Smoking is prohibited on our site and inside all the buildings. Don't use mobile phones while driving. Drive slowly and carefully. **Wear your safety equipment.** A big Vestas logo. Vestas. **ALL VISITORS REPORT TO SITE MANAGER.** Vestas. **SITE SAFETY.** All visitors must report to the site official and obtain permission to proceed onto the site or any work area. **Danger** construction site. **Warning to public** This site and its contents are private property. No unauthorised persons allowed on this site. Liability will not be accepted by the.. *a part of the sign is obscured by a lower fence* ..damage sustained by trespassers. **Keep out.** Another sign in front of the fence has the word "**DANGER**" written in bold letters in Norwegian and says something about blasting and explosion sirens. It seems to me that most of the blasting work has been done already, and the turbines are fully assembled. I ignore the signs and proceed up the mountain.

You know the feeling when you take a shortcut through someones back garden, hoping they don't see you? The skinny tires on my moms electric car are struggling with the coarse gravel, so I have to drive slow. I see a motorbike in my rear view mirror. He stops in front of the warning signs, turns around and drives away. As I creep over the ridge two trucks fly across the road in front of me, leaving big clouds of dust behind them. Construction workers. Intimidated and anxious I stop the car, but they appear to not have spotted me. As the road flattens out I see the gate leading to the road they came from, and another gate leading the way they went, to the very top of the mountain marked by a giant wind turbine. I park the car and step out. The road behind me cuts through the landscape like an open wound. Im standing on a gravel road the width of a football field, surrounded by fences and gates. Down a ditch next to the road is an old hiking path marked by the trekking association's signature red paint leading to a wooden stile crossing a fence, a reminder of the ancient Norwegian right of public access to the wilderness¹¹. Am I really trespassing?

¹¹ The right to roam applies to open country, sometimes also known as "unfenced land", which is a land that is not cultivated. In Norway, the term **covers most shores, bogs, forests and mountains**. Small islands of uncultivated land within cultivated land are not regarded as open country. It does not apply to "fenced land", which is private, and includes cultivated land, such as plowed fields with or without crops, meadows, pastures and gardens, as well as young plantations, building plots and industrial areas. However, you have access to fields and meadows from 15 October to 30 April when the ground is frozen or covered with snow. Note that "fenced land" does not need to actually be fenced.

Countrycide

It is becoming increasingly impossible to escape the notion that nature is being murdered by 'anti-nature' – by abstraction, by signs and images, by discourse, as also by labour and its products. Along with God, nature is dying. 'Humanity' is killing both of them – and perhaps committing suicide into the bargain.

Henri Lefebvre, The production of space, 1974

In the production of space, Henri Lefebvre distinguishes between 'absolute' and 'abstract' space. Absolute space is natural space, places like mountains and rivers that have intrinsic and physical qualities whilst abstract space is where "capital tears material components from their natural beds and heaps them up in places of its own choosing". Andreas Malm adds that "capital produces abstract space as a matrix of nodes and arteries that evolve not through their revealed biophysical attributes, but through the circuits of capital itself."

Wind turbines are a radical addition to Norwegian nature changing its properties, functions, uses and users alike. Because of their prominent position on the very top of mountains they occupy the views and imaginations of anyone within visual distance as well, sometimes several hundred kilometres away. It is this visual disruption or destruction of the landscape that has created such fierce opposition from rural communities. This could be dismissed as NIMBY mentality, but the protest are rather a defence of the land itself, which holds intrinsic value without being exploited for capital, and support the existence of autonomous communities sustaining themselves and their environment through labor. If the landscape is just real estate for abstract energy production, there is little room for life to thrive and for people to maintain any sort of meaningful relationship to the land. While not the only form of degradation of nature¹² wind farms stand out due to their blatant ecological destruction as well as their physical and visual impact on the natural landscape so present in the collective national imagination. Their infrastructure requirements such as roads and power lines mean permanent damages to land and ecosystem, while their material requirements; massive amounts of reinforced concrete, steel and glass fibre composites are heavily polluting, non-recyclable and conveniently left out of the carbon equation. In the construction process of on-shore wind farms, large areas of bogland – our most CO₂ absorbent landscape – are dug up releasing undisclosed amounts of 'captured' carbon into the atmosphere. Degradation of nature, or land conversion, is the greatest influencing factor for biodiversity in Norway.¹³

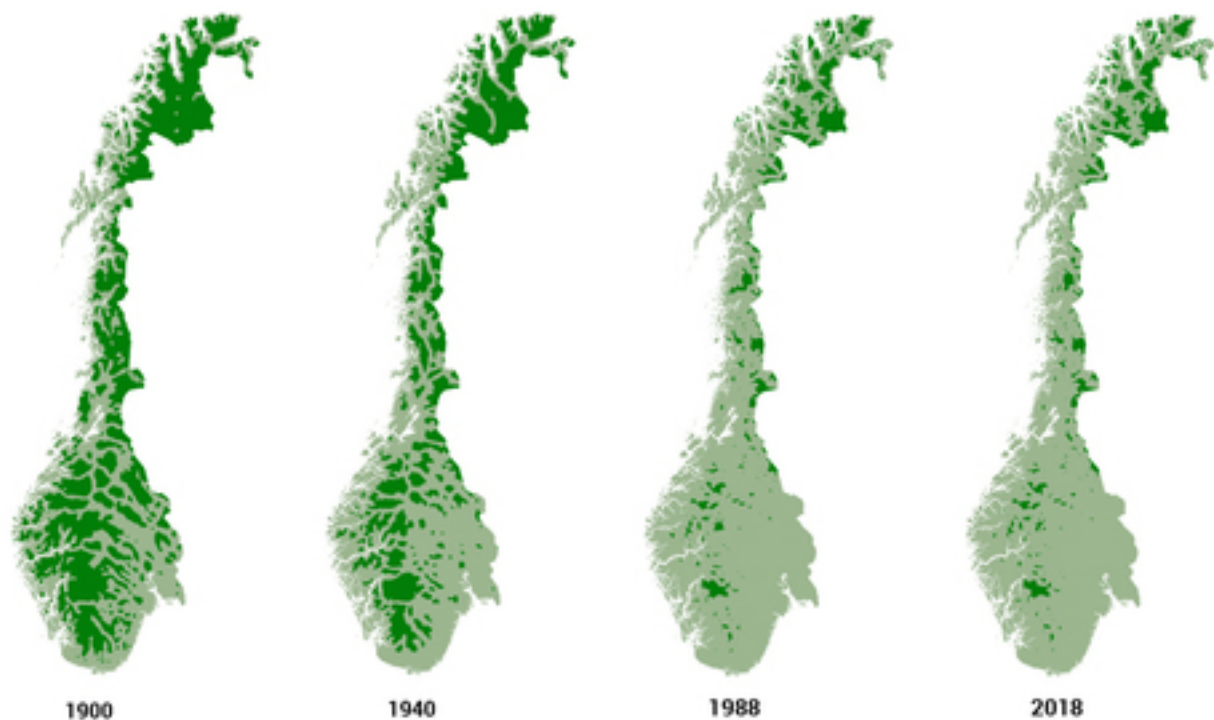
¹² Degradation of nature or degradation of land refers to practices changing, fragmenting or developing areas of nature resulting in loss of habitat threatening ecosystems, biodiversity and reducing the resilience of nature.

WWF. (2020) Trusler mot arter og natur. Retrieved from <https://www.wwf.no/dyr-og-natur/truslene-mot-verdens-arter>

¹³ Norges miljøstatus for 2020 (2020, June 5) Retrieved from <https://miljostatus.miljodirektoratet.no/norgesmiljostatus/>

According to WWF's Living Planet Report¹⁴ the global population of vertebrate species has been reduced by 68 percent since 1970 and the total bird population in Europe has been reduced by 400 million in the last 30 years. Statistics of animal and insect populations world wide point towards extinction in the near future, as a result of the loss of biodiversity. The biggest contributor to this loss is land conversion – physical destruction of nature.¹⁵ Naturvernforbundet, Norways oldest environmental and nature protection organisation, state the following: The total strain on nature is colossal. After more than a hundred years of developing hydropower, as much as 70 percent of our large waterways are affected. More than six thousand new cabins are built each year, many of them in vulnerable areas. There are now more than 430,000 cabins and holiday homes in Norway. Wind turbines occupy large areas of untouched nature. The wind turbines that have been built, are under construction or have been granted a license will cover 630 square kilometers of non-invasive nature, according to the Norwegian Environment Agency. The forests are no exception. Three quarters of all Norwegian forests have been cleared and converted into plantations, and less than three per cent of the productive forest is older than 160 years. Not that long ago the situation was completely different. At the start of the 20th century about half of mainland Norway had wilderness character. From 1988 to 2018 the areas of wilderness character were reduced by 2350 square kilometres, according to The Norwegian Environment Agency. Now there is only 11,5 % left. "Areas of wilderness character" is defined as natural areas located at least 5 km from heavier technical interventions.¹⁶

Villmarkspregede områder i Norge



¹⁵ Skancke, T. (2020, Jan 5). Tekno-miljøvernerne glemmer naturen. Retrieved from: <https://www.aftenposten.no/meninger/kronikk/i/Ad9gxz/tekno-miljoevernerne-glemmer-naturen-torgeir-w-skancke>

¹⁶ Christensen, T. B. (2020 May 13) Mister 30 "Fotballbaner" med villmark hver dag. Retrieved from https://naturvernforbundet.no/naturogmiljo/mister-30-fotballbaner-med-villmark-hver-dag-article40416-1024.html?utm_content=bufferb1fbc&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer&fbclid=IwAR0jWVE-h6UHPntRMWZ0WGo7xf1cFthxM_U89lctkJjSOUXnFmb27JQF4Q

It is not just people that suffer from the industrialisation of remote nature. The placement of wind turbines also interferes with migration paths and nesting sites of protected birds like the Hubro owl, different eagle types and recently the monk vulture *Brinzola* which made national news.¹⁷ Birds maimed by wind turbines, or displaced as a consequence of their construction are neither accounted for nor are the owners held accountable. The slow violence against the occupants of the land echoes past settler colonial practises of the nation state encroaching on indigenous land, with practices such as forced culling of reindeer herds. This violence is also very much ongoing. Jillen Njaarke reindeer grazing district went to court against the Øyfjellet wind power plant threatening reindeer herding in the area, lost the case and were ordered to pay 1,76 million kroner in legal fees to their counter parties Eolus Vind Norge Holding AS and Øyfjellet Wind AS.¹⁸

Speaking at a panel on Indigenous self-governance in 2018, Aili Keskitalo, the president of the Saami Parliament in Norway, said: “I’d like to speak about the paradox of green colonialism, when colonialism has dressed up in nice, green finery and we are told that we have to give up our territories and our livelihoods to save the world because of climate change.” “We are told that we have to have wind power plants – they even call them wind parks, but they are really industrial power plants – in our reindeer herding areas, because the world needs clean energy,” she continued. “So, as an Indigenous people, we do not only carry the burden of climate change, but we also carry the burden of mitigation, or the world’s reaction to climate change, and it’s a pretty heavy burden.”¹⁹

Wind turbines produce infra- and ultra sound which can be damaging to nearby wildlife who are sensitive to high and low sound frequencies, and studies have shown they disturb REM sleep in people living within a certain distance²⁰. Generally, the effects of wind turbines on living creatures is under-investigated and there might be more unknown consequences. Developers are required by law to assess the impact of their construction on nature, and hire consultants to manufacture reports on issues like these. If a report is not favourable to the planned construction, new consultant are hired to produce new reports contradicting the old ones, which the The Norwegian Water Resources and Energy Directorate then favour in their assessments prior to granting concession. In the case of the Okla wind farm, esteemed biologist John Bjarne Jordal classified an area in question as nature of “great value” in a report from 2007. Based on this report both the the county governor and the Norwegian Environment Agency opposed construction plans in the area. The Norwegian Water Resources and Energy Directorate, however, ordered an additional study to be made. The new report was made

¹⁷ Morsrund, G. (2020, Mars 27) Fløy fra Spania – ble kvestet i vindkraftverk. Retrieved from <https://www.nrk.no/rogaland/floy-fra-spania--ble-kvestet-i-vindkraftverk-1.14957047>

¹⁸ Larsen, D. R. (2020, Oktober 15) Sametingspresidenten: – Vindkraftutbygging skaper sorg og smerte hos meg. Retrieved from <https://www.nrk.no/sapmi/sametingspresidenten--vindkraftutbygging-skaper-sorg-og-smerte-hos-meg-1.15198395>

¹⁹ Reid-Collins, S. (2020, November 30) Arctic Turbulence: Why Indigenous Communities Are Fighting Wind Farms. Retrieved from <https://www.wind-watch.org/news/2020/11/30/arctic-turbulence-why-indigenous-communities-are-fighting-wind-farms/>

²⁰ Michael G Smith, Mikael Ögren, Pontus Thorsson, Laith Hussain-Alkhateeb, Eja Pedersen, Jens Forssén, Julia Ageborg Morsing, Kerstin Persson Waye, A laboratory study on the effects of wind turbine noise on sleep: results of the polysomnographic WiTNES study, *Sleep*, Volume 43, Issue 9, September 2020, zsaa046, <https://doi.org/10.1093/sleep/zsaa046>

in 2013 by a fishery biologist and a botany student, and contradicted the previous one completely – classifying the area as nature of “medium–little value” and “little value”. The second report was widely criticised for having obvious flaws and misinterpretations of the landscape, yet The Norwegian Water Resources and Energy Directorate and The Norwegian Petroleum Directorate chose to value the new report and granted concession.²¹

The current construction of renewable energy in Norway is not predicated on the need for more energy or the transition to “carbon neutral” power – the country is already sufficiently powered by hydroelectric dams – but is rather built on a political decision to become a supplier of renewable energy, ‘the battery of Europe’, mirroring its current export of fossil fuel. The move has meant a transaction of both capital and land into the hands of private investors as state subsidies have made cost–intensive construction financially viable and attractive to foreign investors and private equity funds. Infrastructure requirements for the increased production of electricity is covered by Norwegian citizens through their electricity bills, profiting private companies while taxing consumers.

The extraction of wind in the natural landscape shares a curious connection to the data extraction model of digital media corporations in surveillance capitalism. The software is designed to keep you readily available for consumption 24/7 while harvesting your data to create high-precision statistical associations used for targeted ads. The lure is social communication, but the rapid consumption and dissemination of content shortens your attention span and keeps you occupied from alternative activities while profiting from the commodification of your time. Wind turbines supposedly offer ‘clean’ energy production, but the constant exploitation of the natural resource occupies the land and conditions other activities and uses of the surrounding space. Among the new industries attracted by the remote production of ‘clean’ energy are server farms, giant warehouses filled with computers. Server farms require large areas of land and huge amounts of electricity in order to power and cool computers processing and storing data. In Time, Rogaland the municipality is investigating the possibility of a data centre on 6000 square metres of agricultural land, hoping to attract big tech companies with cheap renewable energy²².

Here is a lesson; What happens to people and what happens to the land is the same thing.

Linda Hogan, Dwellings: A Spiritual History of the Living World, 1995

²¹ Thunvold, A. & Fjeld, I. E. (2020, September 24) Hyret inn nye konsulenter – naturen på Stad mistet verdi over natten. Retrieved from <https://www.nrk.no/klima/ble-advart-om-uerstattelig-natur--sa-likevel-ja-til-vindkraft-pa-stad-1.15163177>

Larsen, T. (2019, oktober 17) Kvaliteten på miljøundersøkingar ved konsekvensutgreiing av vindkraftsaker. Retrieved from <https://www.nina.no/Portals/NINA/Bilder%20og%20dokumenter/Larsen%20Kvaliteten%20pa%20miljoundersokingar%2C%20vindkraft%202019.pdf>

²² Politisk strid om jordbruksareal skal bli datasenter. (2020, April 14) Retrieved from <https://www.digi.no/artikler/politisk-strid-om-jordbruksareal-skal-bli-datasenter/489814>

Brinzola's last flight

In April 2019 the monk vulture known as Brinzola started an epic journey north from her home in Spain. Brinzola was born in the wild, but had been hurt as a young bird and rehabilitated by the Monachus project, a conservation effort to reintroduce the monk vulture to the Iberian ecosystem. The bird was fitted with a GPS tracker in 2018 before being reintroduced into the wild. The first leg of her journey ended in Trønderlag in Norway where Brinzola was spotted feasting on a reindeer carcass to the great enthusiasm of local bird enthusiasts. She then traveled around the south of Norway for several months, spending a lot of time in Rogaland county.

On the 20th of March 2020 local birdwatching enthusiast Egil Ween was contacted by the Monachus project in Spain after their satellite tracker showed that Brinzola had not moved for 4–5 days. The bird has been known to stay around the same location for several days at a time when feasting on a carcass, but Ween was asked to inspect the location to see if anything was wrong. Ween found the bird in Gravdal in Rogaland, where the Bjerkreim wind power plant was under construction. The bird was lying still on the ground with a clearly damaged wing – later determined to be from the impact with a steel wire supporting a mast – constructed as part of the power plant. After reporting back to Spain, Ween captured the bird and delivered it to a local veterinary who determined that the bird had two open fractures and would possibly never fly again. The veterinary, who was paying out of pocket for the service himself, nonetheless decided to operate the broken wing and take care of the bird for the subsequent rehabilitation with the hope of returning Brinzola to Spain where she could spawn a new generation of monk vultures.

On the 17th of September 2020 the sad news arrived that Brinzola had been put down following a decision by the Norwegian Food Safety Authority, and given to the Museum of Stavanger. In an article on the Norwegian Ornithologic Association's website Ween detailed the incident, adding that "No one must believe that the industrialisation of nature does not pose a threat to our wild birds, and birds of prey especially!".

Foreseen circumstances

**And (B) that it has also been discovered by geophysics
That each gallon of petroleum
Photosynthesized from sun radiation
Into hydrocarbon molecules
Regeneratively proliferated by ecological organisms
Harvested and buryingly stored
As concentrated fossil residues
Within this Earth's crust
By wind water and gravitational power investment
Is so long drawn out a process
Requiring so much energy
That it costs nature
One million U.S.A. 1960 dollars worth of energy
As combined work pressure and heat
And chemical interexchanging quantities
Stated in scientifically defined constants
Operatively sustained
Over the requisite millenniums of time
Necessary to produce each gallon of petroleum
When that much energy
For that much time
Is priced at the same rate
At which electrical energy is charged to us today
By the public utility companies
Stated on our monthly bills
In money units for each kilowatt hour
Delivered to us of that much energy**

**Wherefor in Cosmic Costing
Of the regenerative affairs
Of Physical Universe
Wherein all metabolic interexchanging
Is meticulously accounted
To the last unit
Of electron-rest-mass value
Each average automobile commuter
Costs nature several million dollars each day
To go to his eco political-system-invented job
For which work the economic system
Usually pays these right-to-live earners
Less than one hundred dollars a day
While less than 10 percent of them
Produce any real wealth
Of direct human life support**

Buckminster Fuller, What I am Trying to Do, 1962

Buckminster Fuller's cost of a gallon of gas was estimated by oil geologist François De Chadenedes by considering the energy required by the natural processes necessary to create the petroleum, and calculating the retail rate of that much energy for that length of time as charged by public utilities. The equation illustrates the absurdity of cheap oil, and resonates with the externalities we have since become all too familiar with in the form of climate change created by fossil fuel combustion. The 'real cost' as we now know might now be the extinction of all life on the planet.

“We are young and, like children, we are recklessly abusing and squandering our resources. We have created a runaway, computerised high-tech society without the ability to manage its toys. Now we are forced to face the consequences like adults. But there is an obvious reluctance: we have been spoiled, and the solutions are painful, expensive, and humiliating.”

Agnes Denes, The Human Argument, 2008

'Externalities' – as they are termed in economics – of the fossil fuel industry have been known for a long time but have been ignored and suppressed by the powerful industry. Compared to renewable energy they are also less apparent as the sites of production are remote and the effect of consumption – the concentration of CO₂ in the atmosphere – abstract and indirect. The disregard for externalities is one common denominator illustrating the similarities of fossil and renewable energy production. Externalities of renewable energy production are in many cases much more immediately visible, but still not properly accounted for. In August 2019 the 100th white-tailed eagle killed by wind turbines was registered at the Smøla wind farm in Møre and Romsdal, Norway. Scientist had then been registering dead birds in the area since 2006, and had found a total of over 500 birds of different species. The white-tailed eagle is Norway's largest bird of prey and a protected species.²³ The bird is illegal to hunt and kill and doing so warrants a penalty, yet the large amount of birds killed by the energy industry comes without consequence. The value of the bird – in itself or for the ecosystem it exists in – is ignored as production of energy is privileged over life.

Another example are fish farms, present in Norway since the seventies, that concentrate up to several hundred thousand fish in confined net structures floating in the sea, most commonly in the calmer waters of fjords and bays. The extreme concentration of living beings in confined space fosters disease and is an ideal environment for parasites like the salmon louse which feeds on the mucus, skin and blood of the fish. Fish farms dramatically increase the amount of salmon louse, and escaped salmon carry the parasite to rivers and wild salmon, damaging fish stocks in fresh water bodies and ocean alike. The concentration of excrement on the seabed below fish farms has also proven to have negative effects for marine life. The industry's response has been to feed the captive fish antibiotics and spray them with chemicals, which has other consequences and has even resulted in mass death²⁴. Due to the high concentration of chemicals in the production of farmed fish, Norwegian salmon has been branded the world's most toxic

²³ 100 havørner funnet drept av vindturbiner på Smøla (2019, September 30). Retrieved from <https://www.faktisk.no/faktasjekker/wRV/100-havorner-funnet-drept-av-vindturbiner-pa-smola>

²⁴ SalMar anmeldes for massedød hos oppdrettsfisk (2016, April 6) Retrieved from <https://www.nrk.no/norge/salmar-anmeldes-for-massedod-hos-oppdrettsfisk-1.12887405>

food²⁵. In 2020 Ocean Farm 1 – the world's first offshore fish farm – was anchored 5km off the coast of central Norway. With a volume of 250,000 m³ it can hold approximately 1.5 million Atlantic salmon.

As we are floating off the coast of Norway, offshore wind farms deserve a mention as well. The placement of floating wind farms in the open sea are hailed as the post-oil industrial adventure of Norwegian energy and a perfect marriage of oil industry know-how and 'the green shift'. Compared to on-shore wind power they offer far less natural destruction in the construction process as well as more stable and higher wind speeds. Still, they are assumed to be just as devastating for migrating birds and potentially an even greater threat for seafaring birds. The industrial power plants could also affect important breeding grounds for great fish populations. Additionally they are opposed by fishermen for being placed in the middle of their fishing territories, thereby threatening the livelihoods of coastal communities. The wind farms as well as off-shore fish farms, again extract resources without regards to their surrounding ecosystem. The value they generate in the form of profit, solely benefits their private owners while the 'external' costs are paid for by the local communities and ecologies. These practices highlight the necessity to not just consider the externalities of extraction or consumption, but the totality of the chain of events necessary to produce the natural product, and its surrounding ecosystem.

On the 27th of March 1980 the offshore housing platform "Alexander L. Kielland"²⁶ capsized at the Ekofisk oil field in the North Sea, killing 123 people and leaving 89 survivors. After the disaster, a Public Inquiry Commission investigated the disaster and gave advice for improvement in security and technical standards. The commission concluded that a faulty welding at the French shipyard that built the platform caused the disaster. The inquiry was with limited involvement of those influenced by the disaster. Thus, a democratic discussion of the disaster was suppressed and those affected by the disaster experienced that those in power covered-up and did not want to expose the multi-factors of the disaster.²⁷ Historian Marie Smith-Solbakken wrote her Ph.D dissertation on the accident and with Tord F. Paulsen authored the comprehensive publication "Plattformen som ikke kunne velte" in 2020. In the introductory text "Med blikket på Kielland", Aslak Sira Myhre writes the following.

²⁵ Is Farmed Salmon Really the Most Toxic Food in the World? (2019, April 19) Retrieved from <https://visiontimes.com/2019/04/19/is-farmed-salmon-really-the-most-toxic-food-in-the-world.html>

²⁶ Alexander Lange Kielland, the famous writer the platform was named after, is known for critiquing the exploitation of workers by the bourgeoisie. He was also the brother of artist Kitty Kielland.

²⁷ Smith-Solbakken, M. & Wallin Weihe, H. S. (2019) The Alexander L. Kielland Disaster - The Concealment and the Indignation

...And we experienced, consciously or unconsciously, that death and injury was a part of the oil industry. The back of the medals soon to be awarded as the yuppie period and welfare growth across the nation, was death, danger and injury. "Kielland" was the great manifestation, but it was not alone. At Rosenberg, where the platforms were built, people were injured. On the supply boats delivering food and equipment to the platforms, people were injured. In the helicopters, under water, on the platforms, everywhere people were injured. The North Sea is a dangerous ocean, steel and concrete are dangerous materials. In total more than three hundred people have died in the oil industry since its inception, offshore and onshore.

Aslak Sira Myhre, Med blikket på Kielland, 2020

Hopefully at the end of the Norwegian oil age, it is important to commemorate the achievements of the industry. In the pursuit of oil, a small fishing village on the west coast of Norway became the base for an industry operating in some of the most hostile waters on the planet, completing stunning technical endeavours and building astonishing structures like the Troll A platform, at 472m tall the largest man made structure ever moved. Considering what this massive material, capital and labour effort – if directed at a more noble task than pumping oil out of the ocean floor – could have achieved, brings great faith in the ability of cities like Stavanger in tackling promethean challenges and an optimism in the face of the unstable future ahead of us. But of greater importance than oil pride is the realisation that the industrial adventure has cost far too much and the beneficiaries have been too few. The endless pursuit of material wealth has lead us down the wrong path, and we may possibly face a dead end. As for Norwegian pride, perhaps the greatest achievement is what we haven't done. The rivers that are still free flowing, the mountains that remain untouched since the Caledonian mountain range folding 400 million years ago, the oil reserves left in the earths crust and the people that are still able to live in harmony with and of nature, free from capital exploitation or state intervention - not by chance, but by the deliberate care of generations of people fighting to protect landscape, ecology and culture.

Buy me a river

The countryside has historically been the place of production for the goods traded and consumed in cities and the binary division between city and countryside is and has arguably always been fictional. Cities reach far out into remote landscapes for the resources and labour power necessary to sustain its consumption and growth. The larger the city the greater the reach it seems, attested by the city of Munich's Stadtwerke Munchen ownership of wind farms on Norwegian mountains. Cities are centred around massive surplus and waste that is divided extremely inequitably. Rather than designing new modes of resource extraction for capital – removed from human settlements and creating new problems and needs for increased consumption – we should reverse the model, focusing instead on what forms of human labour can be beneficial and synergetic to our fragile natural environment and its ecosystems. Learning from Arne Næss, the focus has to lie on increased quality of life, not increased material growth.

This is something that is very apparent in indigenous reindeer herding²⁸ for instance, where a human population co-exist with and care for a 'resource' (which then nurtures the land), physically following it across its natural migration as opposed to locking it in an enclosed space. Sami relationships to land, mountains, rivers and oceans is perhaps something the settler colonial nation should learn from and invest in rather than new industrial schemes. A multigenerational perspective, common in Samí culture, helps to imagine alternatives to our current capitalist ways. Pre-industrial Norway for instance, offers lessons on sustainable resource management. Coastal cities like Stavanger would depend on the proper management of their fish stocks and large amounts of the population would be engaged in fishing - as opposed to the centralised corporate trawl fishing happening today which is devastating to marine ecology. Stavanger being dependent on fish rather than oil would require a healthy ocean, and the focus away from generating surplus capital would counter unwanted side effects like fish-population depletion. An alternative to the maintenance of our problem-generating activities could be pursuing activities that naturally avoid these consequences – and ensure meaningful jobs for the population in the process. With a focus on generating jobs rather than capital, large scale environmental action is suddenly viable.

A suggestion would be turning to the sea once again, but instead of uncovering centuries old decomposed organic matter in the form of fossil fuels, or exhaust other non renewable resources such as minerals, perhaps we could instead turn our attention to the fantastically diverse life in the oceans – threatened by our actions in the form of ocean acidification and temperature rise as well as industrial fishing, fish farming and other marine industrial practices like wind turbines – and treat those lifeforms with the care and respect they urgently need thanks to our negligence. Norway has 6 times greater sea- than land area, and with proper management the sea can once again become the main food source for the country, far less environmentally impactful than traditional agriculture and meat production. The sea, and the country's expansive coastline should once again become the main artery for transportation, the lack of friction being far more energy efficient and environmentally friendly than the construction, maintenance and use of roads and highways.

²⁸ Petroglyphs in Bossekop, Alta show depictions of tame reindeer herding as far back as 3500 BC.

The anthropocene narrative so popular in environmental discourse is problematic because it assumes everyone a 'casual responsibility' and further points at the solution as in the hands of techno capital powers. In *Fossil Capital*, Andreas Malm, explaining the inception of the steam engine (and the fossil economy with it), describes how climate change is not a collective action of humanity but a white–western–male–capitalist–settler creation. “Capitalists in a small corner of the western world invested in steam, laying the foundation of the fossil economy; at no moment did the species vote for it, either with feet or with ballots, or march in mechanical unison, or exercise any sort of shared authority over its own destiny and that of the earth system.” The fossil economy responsible for climate change is indeed “settler business”.

A lot of the problems we face lie within capitalism itself and by extension neoliberalism, part of the reason why state departments operate more like private companies and are motivated by economic gain more than anything else. In the case of wind power, the concession system and the shared intentions of The Norwegian Water Resources and Energy Directorate, private power companies and the consultants they hire – without the presence of an independent commission of inquiry – creates the foundation for systematic de-valuing of nature, if not for outright corruption.²⁹

The current approach of the Norwegian government is riddled with contradiction and hypocrisy. It is apparent that in order to address issues like climate change, we can not simply change the energy source and continue business as usual. The management of our common resources should be just that, not speculation and commodification. De-carbonisation is of course necessary, but it is not enough. What we need is systemic change. The economic system and the political system that has steered us sternly into the current predicament are at fault and are not capable of harbouring the necessary change. Reworking the unjust social property relations imposed by capitalism would be a start. Throughout this reconstruction we also have to change our thoroughly derailed value system. As a secular nation we can find meaning in communion with nature, and with each other. Wind power resistance has united those empathising with the natural environment and shown them the limits of the influence of oppressed people, when in opposition to government and capital. Environmental action is futile without solidarity, which needs to extend beyond national borders. We should adjust our time perspective to look beyond the seemingly permanent horizon of the young nation state, glimpse the end of capitalism and shake the fossil fuel burning habit we just picked up. We know what really matters and we can let go of that which doesn't. A time of great turmoil is also an opportunity for great change, where the rigid systems threatening our lives are exposed and vulnerable, ripe for untying. From a western perspective climate action is often perceived as a sacrifice, having to let go of material comforts. In reality we are already sacrificing too much. Climate, ecology, biodiversity and culture is all being surrendered for the benefit of the few, to our common demise.

²⁹ Thunold, A & Heimdal Reksnes, A (2021, January 21) *Natur i Maskineriet*. Retrieved from <https://www.nrk.no/klima/xl/utbyggere-kjoper-konsekvensutredninger--naturen-kan-tape-1.15212845>

“It has been said that we are all Indigenous to human kind, but since human kind seems to have developed too far away from its common and natural origin, we need to relearn our submissive position to nature, to understand and respect its superiority yet fragility to carry all life on this planet. Like children, it seems we need to relearn a basic consciousness of sustainable and communal thinking and existence.”

Máret Ánne Sara, Sovereign Words, 2020

Disclaimer

My knowledge of Sámi people comes from a narrow range of literature, not from lived experience – and should not be assumed to represent or accurately depict indigenous views or values.