COMMON FINDINGS REPORT

‘GREEN’ MULTINATIONALS EXPOSED

HOW THE ENERGY TRANSITION IS BEING HIJACKED BY CORPORATE INTERESTS

For over a century, energy multinationals have been wrecking the planet and exploiting people in pursuit of profit. Now, power producers and technology manufacturers are marketing themselves as 'green' to boost their reputation and benefit from public subsidies, grabbing lands, violating human rights and destroying communities along the way. Our investigation of fifteen 'green' multinationals conclusively shows that financial returns, not decarbonisation, is their primary business. 'Green' capital has taken over the energy transition, dictating its pace and blocking climate policies that hamper its profits. It is time to take on these greenwashing corporations and reclaim the entire energy sector through public ownership and democratic governance.

This report is the second part of the Public Power trilogy by the Transnational Institute. The first part, the 'Green' Multinationals Exposed report, unpacks the six policy myths that threaten decarbonisation and the final part will argue for a peoples' takeover of the entire energy industry.

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INTRODUCTION

Large multinational energy firms increasingly promote themselves as 'green', arguing that they are at the forefront of the energy transition. In reality, these companies have hijacked the transition in order to protect their profits.

'Green' multinationals largely behave like fossil fuel giants — no surprise, given that many of these firms are primarily fossil fuel companies. This is true both of private transnational corporations and large state-owned conglomerates, with many of the latter adopting — especially outside the countries where they are based — profit-driven business models that wreak social and environmental havoc. **No meaningful energy transition can take place until these greenwashing corporations are dismantled and replaced by a publicly-owned and democratically organised energy sector that is not run for profit.**

The findings below are based on profiles of 15 companies, including some of the world's biggest energy multinationals that are supposedly green in terms of the renewable energy that they produce (or claim to produce) or the transition technology that they manufacture. These firms purport to be at the forefront of climate action — and in doing so, give the impression that the public can simply count on market forces and industry to decarbonise society. Yet these profiles provide evidence that these companies have been consistently undermining energy transition efforts.

The 15 companies profiled in this report have spent a combined total of US$130.77 billion in dividends and US$24.80 billion in share buybacks between 2016 and 2022 — all while still relying on public money to invest in new projects. In total, they made a profit of US$175.86 billion between 2016 and 2022. This is more than seven times the real financial support that rich countries have provided to poor nations to tackle and adapt to climate change (despite pledging US$100 billion a year in 2009).[1] They have continued to amass profits while the world — particularly poor, Southern and racialised communities — has been suffering from the COVID-19 pandemic, climate breakdown, the worst energy crisis in decades and a subsequent cost of living crisis, pushing many more millions into poverty.[2]

To compile the company profiles, we collected financial data on each company's business activities, history and shareholders — alongside information on the social, environmental and political impacts connected to their corporate practices.

The companies profiled are mostly (but not exclusively) energy firms based in North America and Europe: British Gas/Centrica, EDF Renewables, Enbridge Inc., Endesa, E.On, Engie SA, Iberdrola, NextEra Energy, Inc., Ørsted A/S, Southern Company, Vattenfall. Another profiled company, Adani Green Energy Limited, is based in India. In addition, our profiles include two suppliers of key equipment for solar and wind technologies (JinkoSolar Holding Co. Ltd and Siemens Gamesa Renewable Energy S.A.) and a car- and battery-manufacturer (Tesla, Inc.).

We selected this cross-section of firms from different industry sub-sectors to demonstrate the need to reclaim and transform the energy industry as a whole — from manufacturing to retail, generation to distribution, electric vehicles to storage.

This research was coordinated by the Transnational Institute and executed by CorpWatch, Observatoire des multinationales and Observatori del Deute en la Globalització, all of which are part of the European Network of Corporate Observatories.[3]

HOW GREEN ARE 'GREEN' MULTINATIONALS?

1 MOST MULTINATIONALS THAT PROMOTE THEMSELVES AS 'GREEN' STILL BACK FOSSIL FUELS

Looking at the companies' websites and their corporate documents, you would be forgiven for thinking that they are now fully committed to renewable energy and to ceasing fossil fuel exploitation. This is far from the truth. In spite of what their public communications might suggest, **renewables represent a limited share of the energy mix of most of the electricity-producing companies in our sample.** In many cases, renewables are a relatively modest addition to the company's mix, rather than representing any kind of radical transformation of their business.

US utilities in particular have no immediate plans to give up on their fossil fuel operations, because these remain highly profitable. NextEra Energy, Inc., for example, claims to own the world's biggest portfolio of wind and solar assets, marketing itself as a pioneering clean energy business.[4] Yet the firm operates multiple fossil fuel plants and seven oil and gas pipelines. In 2020, 98.9 per cent of NextEra's US$2.92 billion income was derived from two subsidiary firms: FPL and Gulf Power.[5] That year, FPL reported that 73 per cent of its energy was derived from gas, while Gulf Power reported that 98.7 per cent of its energy production came from coal and gas.[6]

Some self-proclaimed 'green' firms such as Southern Company were funding climate disinformation as recently as 2022.[7] Since the 1990s, the company spent at least US$62 million funding climate change denial, almost twice as much as the US$33 million that Exxon spent on climate denial in the same period.[8] Indeed, as recently as 2017, Southern's CEO claimed that climate change was not real.[9]

Or take Enbridge Inc. While it claims to be one of the largest renewable energy companies in Canada, about 95 per cent of its income is generated from fossil fuels.[10] To this day, Enbridge operates the world's longest crude oil and liquids pipeline system, with 28,661 kilometres of crude oil pipelines[11] and 123,189 kilometres of natural gas pipelines in North America.[12]

The Adani Group went as far as to employ its renewable energy subsidiary Adani Green Energy Limited to finance coal. Investigations following a report by investment research firm Hindenburg revealed that the Adani Group had used shares in Adani Green as collateral to obtain a multi-million credit facility designed to finance its Carmichael coal project.[13]

These examples illustrate the ways in which fossil fuel capital and 'green' multinationals tend to be two sides of the same, extractive coin.

2 SOME EUROPEAN ENERGY COMPANIES DIVESTED BY SELLING OR SPINNING OFF THEIR FOSSIL ASSETS, BUT THESE CONTINUE TO BE OPERATED

Some European companies that are sensitive to public pressure have sold off fossil fuel assets to companies that have less public exposure. While this might go some way towards cleaning up the divesting firm's portfolio, in reality there is no actual reduction in fossil fuel consumption or greenhouse gas emissions.

For example, **once Engie SA decided to focus on renewable energy it began divesting from its coal assets, in most cases selling them to third parties instead of closing them down.**[14] In 2017 Engie sold some of its gas assets to Total.[15] While the emissions continued, Engie saved face. Ørsted A/S has sold three of its gas fields to Ineos (a chemicals giant owned by British billionaire Jim Ratcliffe) for US$1.05 billion, which is continuing to extract gas from these fields.[16] British Gas has sold off much of its domestic gas portfolio. This includes the 900 megawatt Langage gas-fired power plant in Devon and the 2.3 gigawatt South Humber Bank gas-fired plant in Lincolnshire — both sold to Energetický a Průmyslový Holding (EPH), a private company controlled by Czech billionaire Daniel Křetínský.[17] Both plants are still running at full capacity. In 2016, EPH also purchased multiple German coal plants and lignite mines from Vattenfall, helping Vattenfall reduce its carbon emissions by 70 per cent overnight.[18] EPH continues to operate these assets at full capacity.[19]

In other instances, firms have boosted their green credentials by diverting their fossil fuel assets into separate new businesses. This was the strategy of E.ON, which in 2016 spun off its fossil fuel power generation business into a new company named Uniper.[20] A 2020 Sky News investigation found that Uniper was the third largest producer of carbon emissions in the UK.[21] In 2022, the German government decided to buy Uniper,[22] which presents the German public with the opportunity to demand that their government urgently wind down its fossil fuel operations.

All this goes to show that while public pressure has gone some way to stigmatising fossil fuels, corporations are attempting to bypass this issue by selling on or spinning off their fossil fuel assets instead of decommissioning them.

3 'GREEN' MULTINATIONALS GREENWASH THEIR DIRTY ENERGY ASSETS, PARTICULARLY THROUGH GREEN CERTIFICATES AND CARBON OFFSETS

Many electricity utilities in Europe use green certificates to disguise the fact that they are dependent on fossil fuel and nuclear assets. 'Certificates of renewable origin' are awarded to companies for each unit of renewable electricity generated. These certificates can be sold on to other companies, in isolation from the renewable electricity they were previously attached to.[23] **This means that companies routinely greenwash[24] their practices by promoting themselves as renewable suppliers, even if their certificates**

were purchased without any corresponding investment in renewable generation or change to their energy mix. For example, EDF France and Engie offer their customers 'green' or 'zero carbon energy' schemes that are largely based on certificates of origin.[25] This puts a green stamp on electricity that mostly comes, in the case of France, from nuclear reactors or big hydro produced by Scandinavian firms.[26]

In 2019, E.ON claimed that all of its 3.3 million customers in the UK were being switched to '100 per cent renewable energy plans' as it purchased the equivalent in green certificates.[27] An April 2021 report by the consultancy firm Baringa estimated that only 49 per cent of E.ON's power was actually from renewable sources.[28]

The case of British Gas is even more stark. One investigation showed that British Gas was the biggest buyer of green certificates of the UK's energy companies.[29] The utility purchased 20.1 million certificates at a little over £1 per customer per year in 2019–2020 and then 21 million certificates the following year.[30] In addition, British Gas offers customers a '100 per cent renewable electricity' tariff comprised of 10 per cent biomethane (often derived from unsustainable livestock operations) and 90 per cent carbon offsets.[31] The latter tend to involve development projects, often in low-income countries, that have been linked to mass displacement,[32] land grabs and the creation of monocultures.[33] Using offsets and certification, British Gas trumpets its green credentials, despite the fact that its parent company, Centrica, sold off all its wind assets in 2017,[34] and solar meets just 4 per cent of its energy mix.[35]

These greenwashing practices need to be prohibited. But even if they are banned, energy companies will come up with new loopholes unless there are effective systems for scrutiny created via public ownership and democratic governance.

4 MOST OF WHAT MULTINATIONALS LABEL AS 'GREEN ENERGY' IS ACTUALLY NOT SO GREEN

There is often deliberate confusion as to what is considered 'green energy'. The term can be used to cover very problematic types of energy generation, such as nuclear,[36] large hydro,[37] biomass/wood[38] or waste incineration.[39]

In 2020, NextEra claimed that 98 per cent of their energy was generated from a 'diverse mix of clean or renewable sources'.[40] Alongside wind and solar in this 'diverse mix' are natural gas and nuclear power.[41] This is clearly greenwash. **While burning natural gas emits less CO_2 than coal or oil, gas is still a fossil fuel whose impact on climate change is often dangerously downplayed.** Natural gas is predominantly made up of methane. Recent studies estimate that in the first 20 years after methane is released, its climate-disrupting potential is 86 to 105 times as powerful as CO_2.[42] As for nuclear power, it is difficult to justify labelling a fuel that creates dangerous radioactive waste 'clean'.

Southern Company used the Kemper power plant in Mississippi to showcase its commitment to 'green' energy. Southern claimed that the plant would produce 582 megawatts of 'clean coal' power using carbon capture technology [43] Haley Barbour, Southern's chief lobbyist before he became the governor of Mississippi, saw the plant as a way to win US$270 million in federal subsidies and to support the local lignite coal mining industry.[44] However, the project went at least US$5.7 billion over-budget and was never completed: construction was suspended and the carbon capture equipment was destroyed in a controlled explosion.[45] It was customers who picked up the excess costs for this disastrous experiment in an unproven technology.[46]

In fact, **labelling something as green is even used to weaken environmental assessments.** Take India, where the Modi government proposed regulatory changes in 2020 to essentially exempt solar parks from standard requirements such as public hearings and environmental impact assessments.[47] As Adani Green claims to be one of the largest operators of renewable energy plants in India,[48] it is likely one of the biggest beneficiaries of this deregulation.

All in all, 'green' means very little if we leave these companies and their main shareholders in charge.

SOCIALISING COSTS – PRIVATISING PROFITS

5 ‘GREEN’ MULTINATIONALS’ RENEWABLE ENERGY PROJECTS TYPICALLY RELY ON PUBLIC SUBSIDIES

Multinationals rely on multiple forms of public support including direct subsidies, guaranteed purchase prices, purchase power agreements with governments or state-owned companies, and tax credits. Subsidy systems vary between jurisdictions but play a huge role in deciding what renewable capacity gets built and where.

For example, the UK government's Renewables Obligation scheme requires power companies to produce renewable electricity or pay for others to do so.[49] Offshore wind projects are guaranteed as much as £2 for every £1 of power they generate for 15 to 20 years, in addition to the income from the actual sale of electricity at market prices, which are effectively driven by fossil fuel companies.[50, 51]

This scheme helped finance the construction of the 630 megawatt London Array, the world's largest operational offshore wind farm, which was completed in 2013.[52] DONG Energy (now Ørsted) held a 50 per cent share in the project, later revised to 25 per cent, while E.ON had a 20 per cent share, later revised to 30 per cent.[53] The Renewable Energy Foundation, an anti-wind farm group, estimates that in 2020 alone, the London Array received a £285 million subsidy and that the Hornsey offshore wind project received a £479 million subsidy.[54] According to the *New York Times,* in 2010, the UK government guaranteed that the London Array would be paid US$0.18 per kilowatt hour, well over the price paid by consumers (US$0.14 per kilowatt hour) and industry (US$0.11 per kilowatt hour) at the time.[55]

A similar scheme in Germany known as ‘Einspeisetarif’ (Feed-in Tariffs) came into force in January 1991.[56] This guaranteed a fixed price for renewable energy production over a given period of time, typically two decades. This was paid for by a surcharge on electricity consumers, who paid out an extra €24 billion to finance renewable energy in 2020, according to one source.[57] Another source (International Institute for Sustainable Development) predicts that Germany will spend over €30 billion to subsidise wind power over time, much of which will likely go to manufacturing companies like Siemens Gamesa.[58]

Engie provides another example. As a developer of solar, wind and hydro projects, Engie benefits from various schemes introduced by governments to accelerate the energy transition, such as power-purchase agreements with governments guaranteeing purchase prices and price support mechanisms (as in France).[59] Engie has also benefited from forms of public subsidies related to the EU’s emergency and recovery funds in response to the COVID-19 crisis.[60]

In fact, **if it wasn’t for public support, producing renewables would not be profitable.** Renewable power has high upfront costs, alongside infrastructure costs that further increase when renewables exceed a quarter of the power mix.[61] Then, when generation costs go down and wholesale electricity prices fall, profit margins are squeezed. As evidenced in the ‘Green’ Multinationals

Exposed report, the first part of TNI's Public Power trilogy, once Germany and China withdrew their subsidies while prices were low, investment plummeted because renewables were no longer profitable.[62] Hence, **in a market model, renewable power production is highly dependent on subsidies or high wholesale prices, meaning that either taxpayers or consumers, through their energy bills, are paying for multinationals' return on investment. In a publicly-owned system, the benefit would return to the public.**

Tesla, Inc., Ørsted, JinkoSolar Holding Co. Ltd and Siemens Gamesa Renewable Energy S.A., the four manufacturers of transition technologies in our sample, have also been relying heavily on public funds. Elon Musk received several billion dollars in government subsidies to build Tesla.[63] Meanwhile, Ørsted was able to develop a number of offshore wind power projects by taking advantage of various subsidy policies created in the 1990s and 2000s across Europe, notably in Denmark and the UK.[64] Today, Ørsted is hoping to cash in on the billions of subsidies offered by the new US Inflation Reduction Act of 2022.[65]

JinkoSolar's explosive growth would not have been possible without China's support for manufacturing and exporting solar panels, which began as early as 2004.[66] In 2012, it received a ¥13 billion (US$1.1 billion) financing package from China Development Bank.[67]

Siemens Gamesa also owes its success to generous subsidies for wind power provided mainly by the Danish and German governments.[68] Gamesa admitted that it opened up manufacturing plants in Pennsylvania purely because it was offered US$15 million in state incentives and over US$25 million in federal tax credits in 2010, after which the Pennsylvania factory won tens of millions US dollars in further government support for exports.[69]

Last but not least, Adani's investments in mega-solar projects have been very dependent on public support, through auctions for renewable electricity by state governments or state-owned companies. Adani Green's 2021–22 annual report puts it bluntly: '*We believe the biggest catalyst for our sector is outside our Company. In two words: "Indian government".'*[70] Or take this comment about NextEra by Robert Bryce, a senior fellow at the conservative Manhattan Institute: '*NextEra may produce wind energy, but its real business is subsidy mining,'*[71] Subsidy Tracker, a project of Good Jobs First, estimates that NextEra has received US$3.1 billion in US loans and bailouts, and US$2.9 billion in subsidies for solar and wind power since 2009.[72]

To be clear, **allocating public funds to accomplish the energy transition is not the issue here.** Considering the huge deficit in energy transition investments, public spending should in fact go up. **The problem is that the current financing model, in which governments basically pay private corporations to deliver green energy, ultimately undermines decarbonisation by socialising costs (shifting the costs to society as a whole) and privatising profits.**

6 'GREEN' MULTINATIONALS AND THE FINANCIAL SECTOR ARE DEEPLY INTERCONNECTED

Many of the sampled 'green' multinationals are owned and controlled by the same big investment funds. These large financial institutions include Vanguard, Capital Research & Management Co., Norges Bank Investment Management, J.P. Morgan Investment Management, Wellington Management Co. LLP, DWS Investment GmbH and BlackRock. In fact, 12 of the 15 researched companies have Vanguard, the world's second-largest investment firm after BlackRock,[73] listed as one of their main shareholders.

In 2022, in an initial survey, we found that BlackRock, the world's biggest asset manager and one of the world's top investors in climate destruction,[74] was a shareholder of nine companies in this cross-section. But by October 2023, according to the shareholders list compiled by Marketscreener, it was just a top-10 shareholder in NextEra and Centrica, the parent company of British Gas.[75] This could be understood as part of development in which **money managers, such as BlackRock, are shifting billions out of funds that take social, environmental and governance (ESG) factors into account.**[76]

Most of these shareholders adopt a 'passive finance' strategy and use proxy voting. This means that they often invest in the fossil fuel industry alongside 'green' firms, and do not use their influence as shareholders to push for climate-friendly strategies. These financial institutions invest in 'green' multinationals to meet some ESG criteria recognised by financial markets -- and to spread risk across multiple companies. T**hrough their passive finance strategies, they exert power and influence over the energy sector as a whole, rather than just single firms.**[77] Moreover, as demonstrated by BlackRock's investment shift, such shareholders come and go, depending on profitability.

'Sustainability' criteria are easily exploited. Take, for example, Enbridge, who in 2021 received a loan of CA$1.1 billion from Canada's biggest banks to complete Line 3, currently transporting 390,000 barrels of tar sands crude oil a day.[78] This loan was in part conditional on the company meeting 'sustainability' criteria such as reducing greenhouse gas emissions intensity by 35 per cent by 2030.[79] Member of the Couchiching First Nation Anishinaabe peoples Tara Houska said in response: 'Giving Enbridge a sustainability loan is like giving a weapons manufacturer a "peace" loan [..] Even if Enbridge does plan on building a few solar panels with that money, you can't put a fire out and pour millions of barrels of tar sands on it at the same time.'[80]

Accordingly, **the renewable energy sector is highly financialised. As shown in our profiles, in some countries such as the US, multinationals like NextEra and EDF Renewables treat solar and wind projects as an asset category in an 'investment portfolio'.** These assets are traded between investors and corporations depending on financial calculus and strategy shifts, without long-term commitment.

Indian firm Adani Green is also a case in point. Adani's renewables portfolio has grown rapidly from 1GW in March 2020 to 5GW today and is projected to reach 25GW in 2025, corresponding to a 3,000 per cent increase in Adani's stock price since launching in 2018.[81] Recent accusations of fraud and market manipulation initially hit Adani's stock valuation and investor confidence in the firm, calling future renewables investment into question.[82] However, to the shock of many onlookers,[83] this was short lived, with French multinational Total recently signing a renewable energy deal with Adani Green.[84]

Further research is required to expose in more detail how the collusion between the financial sector and 'green' multinationals is sabotaging the energy transition. Yet these examples leave no doubt that the renewable energy industry is dominated by big finance.

7 'GREEN' MULTINATIONALS ARE IMPLICATED IN PROFITEERING FROM PRICE HIKES AND MARKET MANIPULATION

Huge price hikes have been an additional source of profit for some of the 'green' multinationals profiled. **In some instances, the companies have been found to have manipulated markets and prices.** This has been particularly prevalent in Spain. In 2015, the Spanish National Commission of Markets and Competition (CNMC) ruled that Iberdrola manipulated the price of electricity in 2013, calling its malpractice 'very serious'.[85] The CNMC imposed a fine of €25 million (this fine is still under appeal at the time of writing).[86] In May 2019, Spain's National Commission on Stock Markets (CNMV) fined Endesa €5.8 million.[87] The CNMV found that Endesa manipulated the electricity market to increase wholesale prices between October 2016 and January 2017, coinciding with a peak in demand due to cold weather.[88]

Iberdrola found additional ways to profit from price hikes. In 2021, Iberdrola was accused of causing a 'false drought' by emptying the Valdecañas reservoir in Extremadura, Spain, at the expense of people's water supply.[89] The multinational claims that this action was necessary to generate electricity in the context of a heat wave.[90] However, it did so when the price of electricity was very high, bringing in profits that prompted an investigation by Spain's Ministry for Environment.[91] The minister for ecological transition found the action to be lawful, but that this type of irresponsible behaviour should not be allowed to happen.[92]

Price hikes and market manipulation to maximise profits will continue to happen if these companies are left to their own devices.

8 SOME 'GREEN' MULTINATIONALS MADE BUMPER PROFITS FROM THE WAR IN UKRAINE

Half the profiled companies are experiencing some kind of boost to their businesses thanks to the war in Ukraine, and a few are experiencing major profit spikes.

Traditional fossil fuel companies (like BP and Shell) saw spectacular profits in 2022 because of energy price spikes.[93] This was also true of Endesa, Southern and British Gas because of their fossil fuel portfolios. Endesa's 2022 profits were up 56.96 per cent on 2021, Southern's 2022 profits were up 47.26 per cent on 2021, while British Gas saw the biggest profit jump in 2022: a 211.02 per cent increase on 2021 figures.[94]

Following the outbreak of the war, British Gas raised its energy prices, with the company's standard variable tariff hiked from £1,277.38 a year to £1,970.56 three months after the invasion.[95] Not surprisingly, **Centrica, the parent company of British Gas, reported £3.3 billion in operating profits for the 2022 calendar year — over three times more than the £948 million for the previous year and the highest ever in its history.**[96]

In the European Union, as electricity prices are determined by gas prices, **renewable producers have benefitted from charging higher prices in the wake of the war; even though the war has had no impact on the costs of producing renewable energy.** In the Netherlands, for example, electricity prices have risen tenfold in the wake of the war. As a result, wind farms' and solar parks' shareholder profits have reached far beyond the €384 million in profits they were already making before the price hike, even producing electricity without government subsidies, as profits were now directly subsidised by peoples' energy bills.[97,98] Also Engie's profits doubled in the first half of 2022 compared to the first half of 2021, with the firm benefiting from the rising prices within its European gas business alongside increased prices charged for the renewable energy it produces.[99]

The above evidence shows that **on many occasions the profiled 'green' multinationals' profits do not reflect an uptake in renewables.**

As we have seen (see finding 6), these **bumper profits will be largely redistributed to shareholders, not reinvested in the development of new renewable capacity or used to ease the burden on consumers.** While corporations argue that they need massive government support to make green energy profitable enough, in a privatised system this support merely ends up boosting company profits, fostering private gain instead of investing in the energy transition. This is a perfect example of 'socialising costs and privatising profits'.

HUMAN RIGHTS AND ENVIRONMENTAL ABUSE

9 BIG SOLAR AND WIND PROJECTS RUN BY 'GREEN' MULTINATIONALS ARE OFTEN LINKED TO LAND GRABBING AND HUMAN RIGHTS VIOLATIONS

Corporations need vast expanses of land to build huge onshore wind farms, solar parks and hydropower, which they often gain by depriving Indigenous and rural communities of traditional access. Numerous land conflicts have been documented in Mexico (Iberdrola), Honduras (Siemens Gamesa), India (Adani Green), Western Sahara (Siemens Gamesa), and even Spain (Iberdrola). All this in the name of 'saving the climate'.

Indian authorities and corporations like Adani Green have opted to develop large-scale wind and solar parks, requiring thousands of hectares of land. Indeed, Adani Green's projects have been marred by controversy over allegations of land grabbing and conflicts with farmers and traditional communities.[100] For example, once the Kamuthi solar park in Tamil Nadu became operational, capturing 2,000 hectares of land (including reclassified wetlands), water sources were fenced off and Adani Green pumped huge amounts of groundwater to clean the solar panels, leading to the depletion of local aquifers.[101] The company then turned to desalination of groundwater, allegedly dumping the toxic saline residues and poisoning the land.[102]

Enbridge's Line 3 pipeline (see finding 6) runs through Indigenous territories in Minnesota, resulting in fierce opposition from local tribes.[103] **In response to numerous efforts to shut down the pipeline via blockades, civil disobedience and lockdowns, a series of articles by the Intercept, as well as the Brennan Law Centre, suggests the company has allegedly fought back by hiring surveillance companies and cooperating with local police operations against the Minnesota activists.**[104,105]

Meanwhile, the Lenca people of Rio Blanco, led by the Consejo Cívico de Organizaciones Populares e Indígenas de Honduras, say that **Gamesa, operator of the Cerro de Hula wind farm, occupied their lands without consent and destroyed their livelihoods of subsistence farming.** 'We have been very affected, first because they cheated us. They forced us to sign a rigged contract and we lost our lands,' Gilma Martinez, a Lenca woman, told TeleSUR.[106]

Similar concerns have been voiced in Oaxaca, Mexico. Here, Gamesa is one of the major suppliers of turbines for the Isthmus of Tehuantepec, such as the 70 megawatt Bii Nee Stipa II wind farm which was built in 2012. Local people, many of whom are Indigenous Binniza (Zapotecs) and Ikoojt (Huave), say that the wind farms have cut off access to their farmlands, sacred shrines, and medicinal herbs and plants.[107] **Activists from Juchitán Popular People's Assembly, who opposed wind power projects, have allegedly been harassed and even shot dead.**[108]

These examples show the cross-cutting harms that large-scale infrastructure can cause. Instead, **utility-scale renewables must be developed in collaboration with local communities, not at their expense, by demanding proper**

socio-environmental impact assessment and putting popular co-governance mechanisms in place.

10 'GREEN' ENERGY TECHNOLOGIES ARE IMPLICATED WITHIN MINING AND PRODUCTION PROCESSES THAT ABUSE THE RIGHTS OF LOCAL COMMUNITIES AND HARM THE ENVIRONMENT

Renewable energy technology requires substantial amounts of so-called 'transition metals' such as nickel, cobalt and lithium.[109] These are a source of devastating ecological destruction and human rights abuses. Both Tesla and Siemens Gamesa buy cobalt from Glencore's copper mine in the Katanga region of the Democratic Republic of the Congo, which is alleged to use child labour.[110] The nickel Tesla buys from Canada comes from the Vale mine in Voisey's Bay in northern Labrador, which has long been opposed by the native Innu and Inuit people.[111]

Meanwhile, in the US, the Protect Osage Coalition, composed of members of the Osage Nation, conservation groups and local residents, has been organising to oppose the construction of the Osage Wind project, owned by Enel Green Power, the controlling shareholder of ENDESA.[112] This wind energy project was opposed from the outset, affects local cultural sites and historical graves,[113] and is being developed on tallgrass prairie — an essential habitat which is more effective at capturing and storing carbon than trees.[114] The United States' federal government is now supporting the Osage Nation to fight back against Enel, having found that the company illegally mined limestone and other minerals, owned by the Osage Nation.[115]

Siemens Gamesa uses neodymium for the permanent magnet in wind turbines. Around 90 per cent of the world's supply comes from China, notably around Baotou, the largest industrial city in Inner Mongolia, where it is extracted through a process that uses thorium and uranium.[116] The discarded waste is then dumped into a 120 square kilometre pool of toxic mud and waste, which is slowly draining into the Yellow River, a major source of water in China.[117]

As shown in the profiles, **many of the multinationals' mining and production processes have been associated with human rights and environmental violations, including infringing Indigenous, labour and land rights.**[118] This will remain the status quo until these companies are democratically governed, by and for the public, so that the rights of the environment and local communities can be protected and upheld.

11 'GREEN' MULTINATIONALS VIOLATE WORKERS' RIGHTS RELATED TO SALARIES, FORCED LABOUR, UNION BUSTING AND UNSAFE LABOUR CONDITIONS

As well as issues around land grabs, human rights infringements and ecological destruction, 'green' multinationals are often implicated in the violation of workers' rights. **A growing body of research is uncovering the many labour**

issues in the renewables sector.[119] **These issues range from forced labour to precarious contracts and unsafe working conditions.**[120]

In Endesa's Solar Park Villanueva project in Mexico, workers from subcontracted Mexican companies have been blocking the plant's entrance, demanding that their salaries are paid.[121] According to Mexican newspaper *SDP Noticias,* **they protested because of US$9.2 million in non-payments and alleged acts of corruption, causing the inauguration of the plant to be cancelled.**[122]

Solar industry experts say that JinkoSolar's greatest subsidy is cheap manual labour in Xinjiang, China.[123] **The company's solar panel factory in Xinjiang has been linked to forced labour from a nearby high-security prison and internment camp for Uyghur Muslims, a persecuted minority.**[124]

Workers in EDF Renewables do not have the same status as most other EDF French workers.[125] EDF Renewables' workforce is younger and on more precarious contracts, with a higher rate of turnover. The firm's business model is based on contracting out parts of the projects it builds and manages. In countries outside France, EDF Renewables staff are often not unionised, compared to the average EDF Group workforce.[126]

Finally, consider the case of Tesla. **The company's car factories have one of the worst safety records of any auto-manufacturing facility in the US.** In 2019, Tesla accumulated over three times the number of Occupational Safety and Health Administration violations that its top 10 competitors amassed collectively from 2014–2018.[127]

In February 2023, workers at the Tesla factory in Buffalo, New York, alleged that at least 18 workers[128] had been fired due to their participation in union organising. Workers began unionising due to poor wages and job insecurity, as well as against the introduction of a new surveillance system that monitors their keystrokes — deterring some staff from taking short breaks and using the bathroom.[129] This is not the first time that Tesla has been accused of union busting and unfair dismissal. In March 2023 a court ruled in favour of an employee who was illegally fired after being involved in union organising in 2017.[130]

The energy transition would be but a pipedream without actual workers. **The so-called green jobs that are needed for decarbonisation must provide decent working and living conditions and ensure that workers' rights are respected.**[131] Decent employment is unlikely to be delivered by multinationals such as the 15 profiled in our research.

A CORPORATE TAKE-OVER OF THE GREEN TRANSITION

12 'GREEN' MULTINATIONALS TEND TO PRIORITISE LARGE PROJECTS THAT BENEFIT THEMSELVES OR OTHER MULTINATIONALS

Power purchase agreements (PPAs) are long-term contracts between generators and customers, usually a government, utility or other company. **Establishing PPAs with other large corporations is a core focus for 'green' multinationals'.** As such, the transition is becoming moulded around corporate interests, rather than the needs of communities.

In the US and the rest of the world outside Europe, most of EDF Renewables' projects are based on PPAs with large corporations such as Google, Amazon, Procter & Gamble or BASF,[132] or with governments and public entities.[133]

Iberdrola has signed PPAs with large companies such as Amazon, Apple, Facebook and Nike,[134] alongside recent partnerships in renewable energies with Total and Shell.[135] Not only are operations for the big tech and fossil fuel companies very energy intensive,[136] all of these companies have been associated with human rights scandals.[137]

PPAs pose a serious threat to the energy transition. **When state-owned companies enter into a PPA, they usually pay a private entity the top price for generating renewable electricity and guaranteeing a profit margin, regardless of whether the energy is actually consumed.**[138] And when governments continue to outsource renewable power production, they do not develop the renewable generation capacities in-house to steer the transition in the public interest.

PPAs between multinationals also rely on public investments in electricity grid updates and expansions, which are necessary to facilitate the flow of electricity from generating assets through to the site of consumption. This represents a further drain on public funds.[139] What's more, these **multinational-to-multinational PPAs can represent an additional form of greenwash.** Take Iberdrola's recent PPA with Amazon, for example.[140] This sees Iberdrola wind farms powering Amazon data centres, allowing Amazon to market itself as 'green' — despite the fact that Amazon is implicated in multiple forms of climate-wrecking activity, from providing technological support to BP and Shell's oil extraction[141] through to the promotion of high-consumption lifestyles.[142]

Instead of trying to meet the renewable energy demands of multinationals, governments should prioritise the provision and decarbonisation of essential electricity usage by households and public services. Several renewable energy projects developed by the profiled 'green' multinationals in countries such as India and Mexico were designed to meet the needs of big corporations, whether based in a rich country or close to the domestic political elite.[143] All while, in many cases, the communities that live around those projects — and that have often been affected by land grabbing and other adverse effects — still don't have access to a reliable source of electricity.

13 SOME 'GREEN MULTINATIONALS' ARE PUSHING BACK AGAINST SMALL-SCALE RENEWABLE ENERGY

As discussed (finding 12), **'green' multinationals favour forms of large-scale renewable generation that they can easily profit from. Smaller-scale, decentralised renewables owned by communities and individuals pose a threat to their business model.** Accordingly, some multinationals have gone as far as to actively undermine the expansion of residential renewables.

US firm Southern has a history of doing this. **In 2013, the company levied a US$5 monthly fee per kilowatt hour on any customer who generated solar power in Alabama. This effectively killed off the industry in the state.**[144] The fee was then raised to US$5.41 in 2022.[145] The company tried to impose similar fees in Georgia but voters rejected the measure.[146] Today Georgia has ten times more residential solar installations than Alabama.[147]

Another US firm, NextEra, has used a host of dirty political tactics to undermine decentralised renewables. **While claiming to be one of the world's largest renewable energy producers,**[148] **NextEra worked with Consumers for Smart Solar, an 'astroturf' group, to oppose campaigns in Florida for local residential solar power.**[149] Moreover, its subsidiary Florida Power & Light suggested language for legislation to restrict the adoption of residential solar power in Florida.[150] These efforts can be understood as stamping out efforts by local residents to install their own solar panels. NextEra has allegedly worked with lobbying firms to push back against campaigns in Florida for more local residential solar power.[151] Lobbying firm Matrix Group was deployed on behalf of NextEra and has been implicated in allegations of bribery and attempts to oust political candidates, all with the goal of stopping new legislation promoting residential solar.[152]

14 MANY 'GREEN' MULTINATIONALS USE FOSSIL FUEL CAPITAL TO BUY OUT SMALLER RENEWABLE ENERGY COMPANIES

The capital acquired through decades of using coal, oil and gas is being used by fossil fuel giants to 'green' their image — all while they continue to use fossil fuels. This financial leverage is also being used to drive out smaller local, public or cooperative actors.

In France, Engie has developed its renewable energy portfolio and expertise through the acquisition of smaller companies, particularly Solairedirect for solar and La Compagnie du Vent for wind.[153] Engie, alongside the two other French energy giants EDF and Total, has used its financial firepower to absorb or muscle out most potential competitors that, in contrast to these multinationals, were solely active in the renewable energy sector.[154] Meanwhile, **French legislation has not allowed for the development of local, nonprofit, public or cooperative producers or distributors as was the case in Germany.**[155] Consequently, the three corporate giants have taken over the energy transition, dictate its pace, and have secured most of the benefits to be made from it.

15 'GREEN' MULTINATIONALS ARE EXERCISING HUGE AMOUNTS OF INFLUENCE OVER GOVERNMENTS

In many contexts, policy-making is captured by these 'green' multinationals. In Spain, for example, there is evidence of a revolving door between government and Endesa and Iberdrola: many politicians and officials have taken on senior roles in these firms, while Endesa and Iberdrola employees are also finding their way into government.[156] The same is true in the UK, where secondments between government and British Gas and other energy firms have been well documented.[157] In India, there are worryingly close links between Prime Minister Narendra Modi and Gautum Adani, boss of the Adani conglomerate.[158]

One important way that 'green' multinationals exert their influence over governments is through the control they have gained over renewable energy trade associations and lobby groups. In France, for instance, the dominant trio of Engie, EDF and Total has taken over the renewable energy trade association, Syndicat des énergies renouvelables (SER).[159] Thus emerges a paradoxical situation whereby the group responsible for promoting the transition to renewable energy is controlled by a trio of giant corporations whose business models remain tied to continued fossil fuel consumption. These firms use this influence to prioritise the type of large-scale project that is more favourable to them, to gain more financial support, and to argue for eliminating environmental and social safeguards for renewables projects.[160]

Big businesses taking over renewable energy associations undermines a coordinated transition. Take Endesa's subsidiary Enel Green Power, which was supposed to act as the representative of all renewable energy producers in Spain. Instead, it prioritised its own requests to connect power plants and postponed submitting applications from its competitors to the transmission system operator, effectively denying them access to the grid. Spain's market regulator CNMC fined Enel Green Power €4.9 million for this.[161]

Finally, **some 'green' multinationals have a track record of using (or threatening to use) the Investor State Dispute Settlement (ISDS) mechanism to sue governments for measures that harm their profits.**[162] In doing so, they bully governments into dropping policies that they deem undesirable, overriding domestic legal frameworks in the process. For example, Vattenfall aggressively pursued the German government in 2009 to pay compensation of €1.4 billion for imposing strict environmental requirements to protect the Elbe river from the 1.6 gigawatt Moorburg coal-fired power station in Hamburg.[163] The government agreed to settle the case in 2010 by removing the environmental safeguards and allowing the plant to proceed.[164]

In May 2012, Vattenfall brought another ISDS case against Germany, pursuing €3.7 billion in compensation. This case sought to challenge the decision to shut down the Brokdorf, Brunsbüttel and Krümmel nuclear power plants, in the wake of the Fukushima disaster in Japan.[165] The case was closed in November 2021 after Vattenfall won a related case in the German Federal Constitutional

Court that required Germany to reassess the compensation for closing down the plants — and after a payment of €1.425 billion to Vattenfall was agreed in March 2021.[166]

From revolving doors and taking over renewable associations, to using ISDS to pressure governments to drop environmental policies, it is surely time to kick these 'green' multinationals out of government and claim popular control of the energy transition.

CONCLUSION

Green' multinationals would like us to believe they are the solution to climate change. **Power producers and technology manufacturers may sell themselves as green, but judging by their business practices, the 15 corporations in our research sample do not care about decarbonisation.** The majority continue to back fossil fuels and many of them are in fact primarily fossil fuel companies.

Maximising financial returns, not decarbonisation, is their prime business, with investment funds like BlackRock dominating the industry. 'Sustainability' criteria are exploited to finance climate destruction (Enbridge) and green subsidiaries are used to finance coal (Adani Green). Across Europe, **fossil fuel assets are often not being closed down but simply sold to third parties or spun off into separate companies.** In the United States, solar and wind projects tend to be traded based on financial calculus and strategy shifts, without long-term commitment. Spain's profiled multinationals have been fined for price and market manipulations, jacking up profits at the expense of access and affordability. **Companies actively undermine the expansion of small-scale renewables (NextEra and Southern) or use fossil fuel capital to buy them out (Engie and EDF).**

Many electricity utilities in Europe use green certificates, even if these were purchased without any corresponding investment in renewable generation. **All the firms in our sample prioritise large projects that benefit themselves or other multinationals.** It is also common practice to label fossil gas, nuclear and other controversial fuels 'clean' to boost a firm's reputation and help them gobble up public subsidies.

Their **investments in renewable energy production or transition technology often rely heavily on a variety of public support, including direct subsidies, guaranteed purchase prices and tax credits. Paid for by taxpayers or consumers through their bills, these are decisive for what renewable capacity gets built and where.** The use of public funds to drive the energy transition is not the issue here. The International Renewable Energy Agency (IRENA) has said that yearly investments must more than quadruple to over US$5 trillion if we are to stay on the 1.5 degrees pathway."[167] **The problem is that this financing model is being captured by private interests, which undermines decarbonisation by socialising costs and privatising profits.**

The wealth accumulated by the 15 profiled firms is staggering. **The firms have paid a combined total of US$130.77 billion in dividends and US$24.8 billion in share buybacks between 2016 and 2022.** The highest individual dividend payout in this period was US$5.45 billion, by Enbridge in 2021. The highest individual share buyback was US$3.76 billion, by Southern in 2016. Thirteen of the 15 profiled companies disclose what they pay their CEO. **Despite the fact that the number of people globally without access to electricity is set to increase for the first time in decades;[168] the CEOs of these 13 companies earned a combined total of US$136.89 million in 2022.**[169] The single highest paid CEO was NextEra's John Ketchum, who earned US$17.4 million in 2022.

This eye-watering wealth has been accumulated on the back of public money (finding 5), greenwashing (findings 3 and 4) and exploitative social and environmental practices that threaten the rights of workers and frontline communities (findings 10 and 11). Indeed, most of the profiled companies have been associated with violating Indigenous, labour or other human rights. From Mexico and Honduras to India, Western Sahara and Spain, 'green' multinationals are depriving numerous Indigenous and other rural communities of their lands and livelihoods to build onshore wind farms or solar parks. Moreover, extraction of the 'transition metals' on which transition technology manufacturers rely, tends to involve labour exploitation and ecological destruction.

Electricity firms focus on developing new energy generation capacity, as if this is sufficient to deal with the climate crisis. **They are not interested in reducing energy consumption, as this would stand in tension with shareholder interest which requires them to sell as much energy as possible.** Similarly, the focus on selling private electric cars is undercutting a transition to clean and universal public transport.

The consequence is that the global electricity system has been expanding at a rate of 300 GW per year in recent years.[170] According to the International Energy Agency (IEA), the rate of renewable expansion will accelerate over the coming years, projecting a growth in renewable capacity of between 350 and 400 GW per year between 2022 and 2027.[171] Yet even if this more optimistic forecast comes to fruition, **the lion's share of renewables growth will be cancelled out by rising electricity demand.** Indeed, a 2023 IEA report argues that of the 50 factors they deem necessary for the energy transition, just three of these are on track.[172] In fact, **energy-related CO_2 emissions are still rising, reaching a new record in 2022.**[173]

While a global majority is increasingly confronted with climate wreckage and a cost-of-living crisis, the sampled 'green' multinationals have profited to the tune of US$175.86 billion between 2016 and 2022, with US$37.96 billion of these profits accumulated in 2022 alone. On many occasions, these bumper profits do not reflect an uptake in renewables. These companies' success would not be possible without the worrying levels of influence they exercise over governments — whether through revolving doors, renewable trade associations or Investor State Dispute Settlement cases. **'Green' capital has taken over the energy transition, dictating its pace and blocking climate actions that hamper its profits.**

To deliver a just and timely energy transition, people everywhere need to reject corporate profits and shareholders' interests. Instead, as the upcoming and final part of this Public Power trilogy will argue, we need to build counterpower for a peoples' takeover of the entire energy industry.

ANNEX: FINANCIAL DATA METHODOLOGY

The profit figures for each company are based on the net income figures reported in company annual reports, as opposed to gross profit or earnings before interest, tax, depreciation and amortisation (also known as EBITDA). Typically this number is referred to as 'net income attributable to common shareholders' but some companies used different terminology such as British Gas/Centrica which reported it as 'adjusted operating profit'.

In general, we cross-checked these numbers against the data reported on the Macrotrends website.[174] Where there was a discrepancy (typically very slight, and for a variety of reasons such as exchange rate differences), we used the data from the company annual reports. In one case (the 2016 annual report of Vattenfall), we used profit for the year from continuing operations (as opposed to profit for the year from discontinued operations, because taking older operations into account would have affected our calculations).

Where necessary we used generally accepted accounting principles (GAAP) figures (Tesla) and International Financial Reporting Standards (IFRS) reported data (Ørsted) and profit for the year rather than numbers such as underlying profits (Vattenfall), in order to use comparable and legally required reporting data.[175]

All dividend data was taken directly from the company annual reports. Share buyback data was derived mostly from the ycharts website,[176] with the exception of British Gas/Centrica and JinkoSolar, where we obtained the data from the companies' annual reports, and in the case of Ørsted, where we obtained it from company press releases.

In order to arrive at comparable financial data, we chose to convert all data to US dollars using the average year currency exchange rates from the US Internal Revenue Service website (for Danish kroner, Swedish kronor, euro, Indian rupee and pound sterling).

All fifteen companies were invited to send factual corrections to these findings, with only Enbridge and Vattenfall responding. Some adjustments were made following their response.

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For over a century, energy multinationals have been wrecking the planet and exploiting people in pursuit of profit. Now, power producers and technology manufacturers are marketing themselves as 'green' to boost their reputation and benefit from public subsidies, grabbing lands, violating human rights and destroying communities along the way. Our investigation of fifteen 'green' multinationals conclusively shows that financial returns, not decarbonisation, is their primary business. 'Green' capital has taken over the energy transition, dictating its pace and blocking climate policies that hamper its profits. It is time to take on these greenwashing corporations and reclaim the entire energy sector through public ownership and democratic governance.

Download the full report and the 15 company profiles on https://www.tni.org/GreenMultinationals

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