

'GREEN' MULTINATIONALS EXPOSED



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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‘GREEN’ MULTINATIONALS EXPOSED

**HOW THE ENERGY TRANSITION IS BEING HIJACKED
BY CORPORATE INTERESTS**

TABLE OF CONTENTS


	INTRODUCTION	4
	HOW GREEN ARE 'GREEN' MULTINATIONALS?	7
	1 Most multinationals that promote themselves as 'green' still back fossil fuels	
	2 Some European energy companies divested by selling or spinning off their fossil assets, but these continue to be operated	
	3 Green' multinationals greenwash their dirty energy assets, particularly through green certificates and carbon offsets	
	4 Most of what multinationals label as 'green energy' is actually not so green	
	SOCIALISING COSTS, PRIVATISING PROFITS	12
	5 'Green' multinationals' renewable energy projects typically rely on public subsidies	
	6 'Green' multinationals and the financial sector are deeply interconnected	
	7 'Green' multinationals are implicated in profiteering from price hikes and market manipulation	
	8 Some 'green' multinationals made bumper profits from the war in Ukraine	
	HUMAN RIGHTS AND ENVIRONMENTAL ABUSE	18
	9 Big solar and wind projects run by 'green' multinationals are often linked to land grabbing and human rights violations	
	10 'Green' energy technologies are implicated within mining and production processes that abuse the rights of local communities and harm the environment	
	11 'Green' multinationals violate workers' rights related to salaries, forced labour, union busting and unsafe labour conditions	
	A CORPORATE TAKE-OVER OF THE GREEN TRANSITION	22
	12 'Green' multinationals tend to prioritise large projects that benefit themselves or other multinationals	
	13 Some 'green multinationals' are pushing back against small-scale renewable energy	
	14 Many 'green' multinationals use fossil fuel capital to buy out smaller renewable energy companies	
	15 'Green' multinationals are exercising huge amounts of influence over governments	
	CONCLUSION	27
	ANNEX	30

TABLE OF CONTENTS

MULTINATIONALS PROFILES

PROFILE 1 Adani Green Energy Limited (Adani Group)	42
PROFILE 2 British Gas (Centrica plc)	50
PROFILE 3 E.ON	58
PROFILE 4 EDF Renewables (EDF Group)	66
PROFILE 5 Enbridge, Inc.	74
PROFILE 6 Endesa (Enel Iberia S.R.L.)	82
PROFILE 7 Engie SA	90
PROFILE 8 Iberdrola	98
PROFILE 9 Jinko Solar Holding Co. Ltd	106
PROFILE 10 Nextera Energy, inc.	112
PROFILE 11 Ørsted A/S	120
PROFILE 12 Siemens Gamesa (Siemens Energy AG)	126
PROFILE 13 Southern Company	134
PROFILE 14 Tesla	142
PROFILE 15 Vattenfall	150

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 pipelines¹¹ 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 greenwash²⁴ 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/wood³⁸ 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 CO₂ 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 CO₂.⁴² 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 technology⁴³ 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 2021, 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. **Through 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 re-distributed 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.¹⁰⁵

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.¹⁰⁶ **Activists from Juchitán Popular People's Assembly, who opposed wind power projects, have allegedly been harassed and even shot dead.**¹⁰⁷

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.¹⁰⁸ 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.¹⁰⁹ 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.¹¹⁰

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.¹¹¹ This wind energy project was opposed from the outset, affects local cultural sites and historical graves,¹¹² and is being developed on tallgrass prairie — an essential habitat which is more effective at capturing and storing carbon than trees.¹¹³ 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.¹¹⁴

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.¹¹⁵ 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.¹¹⁶

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.**¹¹⁷ 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.¹¹⁸ These issues range from forced labour to precarious contracts and unsafe working conditions.¹¹⁹

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.¹²⁰ 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.**¹²¹

Solar industry experts say that JinkoSolar's greatest subsidy is cheap manual labour in Xinjiang, China.¹²² **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.**¹²³

Workers in EDF Renewables do not have the same status as most other EDF French workers.¹²⁴ 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.¹²⁵

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 2014–2018.¹²⁶

In February 2023, workers at the Tesla factory in Buffalo, New York, alleged that at least 18 workers¹²⁷ 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.¹²⁸ 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 2017.¹²⁹

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.**¹³⁰ 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**.¹³⁰ 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,¹³¹ or with governments and public entities.¹³²

Iberdrola has signed PPAs with large companies such as Amazon, Apple, Facebook and Nike,¹³³ alongside recent partnerships in renewable energies with Total and Shell.¹³⁴ Not only are operations for the big tech and fossil fuel companies very energy intensive,¹³⁵ all of these companies have been associated with human rights scandals.¹³⁶

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.**¹³⁷ 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.¹³⁸ What's more, these **multinational-to-multinational PPAs can represent an additional form of greenwash**. Take Iberdrola's recent PPA with Amazon, for example.¹³⁹ 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 extraction¹⁴⁰ through to the promotion of high-consumption lifestyles.¹⁴¹

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.¹⁴² 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.**¹⁴³ The fee was then raised to US\$5.41 in 2022.¹⁴⁴ The company tried to impose similar fees in Georgia but voters rejected the measure.¹⁴⁵ Today Georgia has ten times more residential solar installations than Alabama.¹⁴⁶

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,¹⁴⁷ NextEra worked with Consumers for Smart Solar, an ‘astroturf’ group, to oppose campaigns in Florida for local residential solar power.**¹⁴⁸ Moreover, its subsidiary Florida Power & Light suggested language for legislation to restrict the adoption of residential solar power in Florida.¹⁴⁹ 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.¹⁵⁰ 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.¹⁵¹

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.¹⁵² 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.¹⁵³ Meanwhile, **French legislation has not allowed for the development of local, nonprofit, public or cooperative producers or distributors as was the case in Germany.**¹⁵⁴ 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.¹⁵⁵ The same is true in the UK, where secondments between government and British Gas and other energy firms have been well documented.¹⁵⁶ In India, there are worryingly close links between Prime Minister Narendra Modi and Gautum Adani, boss of the Adani conglomerate.¹⁵⁷

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).¹⁵⁸ 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.¹⁵⁹

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.¹⁶⁰

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.**¹⁶¹ 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.¹⁶² The government agreed to settle the case in 2010 by removing the environmental safeguards and allowing the plant to proceed.¹⁶³

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.¹⁶⁴ 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 2021.¹⁶⁵

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."¹⁶⁶ **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,¹⁶⁷ the CEOs of these 13 companies earned a combined total of US\$136.89 million in 2022.**¹⁶⁸ 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.¹⁶⁹ 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 2027.¹⁷⁰ 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.¹⁷¹ In fact, **energy-related CO₂ emissions are still rising, reaching a new record in 2022.**¹⁷²

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.¹⁷³ 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.¹⁷⁴

All dividend data was taken directly from the company annual reports. Share buyback data was derived mostly from the ycharts website,¹⁷⁵ 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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176. For more information, see: <https://ycharts.com>

PROFILE 1

ADANI GREEN ENERGY LIMITED (Adani Group)

HEADQUARTERS Ahmedabad (Gujarat), India

MAIN SHAREHOLDERS¹

- Adani Trading Services LLP — 29.94%
- Adani Family — 20.76%
- TOTALENERGIES SE — 19.75%
- Spitze Trade & Investment Ltd. — 5.01%
- GQG Partners LLC — 4.03%
- Government of Qatar — 2.69%
- Life Insurance Corporation of India (Investment Portfolio) — 1.36%
- The Vanguard Group, Inc. — 1.01%
- Infinite Trade & Investment Ltd — 0.54%
- Norges Bank Investment Management — 0.14%

PROFITS

- US\$0.12 billion in 2022
- US\$0.14 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$1.27 million for CEO Vneet S. Jaain (2022)²

DIVIDEND PAY-OUTS AND SHARE BUYBACKS

- US\$0.00 dividend pay-outs in 2022; US\$0.00 dividend pay-outs between 2016 and 2022
- US\$0.00 share buybacks in 2022; US\$0.00 share buybacks between 2016 and 2022

RENEWABLE GENERATION 8.10 GW in operational capacity as of 2022–2023³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (CRORE ₹)	974.00	489.00	210.00	- 23.00	- 473.91	- 46.67	- 24.56
NET PROFIT (US\$ BILLION)	0.12	0.07	0.03	0.00	- 0.07	- 0.01	0.00
DIVIDENDS (CRORE ₹)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIVIDENDS (US\$)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (CRORE ₹)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

Adani Green Energy Limited is a subsidiary of the Adani Group. Adani Green claims to be dedicated to renewable energy development, labelling itself as the 'world's largest solar power developer'.⁴ It was incorporated in 2015,⁵ in the run-up to the Paris Climate Conference, as the Indian government pledged to develop 275 gigawatts of renewable energy by 2027.⁶ Adani Green grew at a rapid pace through acquisitions and the development of new wind or solar projects in partnerships with Indian states, as part of India's solar development plans.⁷

Following a report by investment research firm Hindenburg, the Adani Group was accused of fraud and market manipulation, which initially affected its stock valuation and its attractiveness to foreign investors and lenders.⁸ In the long term, however, the Adani Group has retained the support of the Indian government and most of the Indian corporate world.⁹

The Adani Group was founded in 1988 and is today one of India's largest conglomerates, active in energy, ports, airports, infrastructure, mining, refining, agricultural commodities and food.¹⁰ It was originally a commodity trading firm, which grew significantly after it built its own port in Mundra, Gujarat.¹¹ After it became the top importer of coal into India, it started developing its own coal mines in India and abroad (Indonesia¹²). It is particularly infamous for its plan to develop the coal reserves of the Galilee Basin, north west Australia, where it has met fierce resistance from local farmers and environmentalists.¹³ The Galilee Basin coal reserves have been described as one of the world's largest 'carbon bombs' waiting to be developed.¹⁴

Despite setting up Adani Green, the Adani Group has in no way given up coal.¹⁵ Therefore, Adani Green could be seen as a greenwashing vehicle for the group, making its coal activities more acceptable to the public in Western countries such as Australia or the UK where they have received criticism for their coal mining activities. For example, in the UK, Adani Green's sponsorship deal with the London Science Museum has been targeted by climate activists.¹⁶

In the investigations that followed the Hindenburg report, it was 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**¹⁷ in the Galilee coal basin.¹⁸ This illustrates the permeability between the coal and green energy arms of the Adani Group, and highlights the fact that the Adani Group is still heavily committed to coal. Following the investigations, several pension funds have withdrawn from their share and bond holdings in Adani Green, and Adani Green was officially removed from the UN-backed Science Based Targets Initiative (SBTi).¹⁹

Gautam Adani, the conglomerate's boss and, prior to the Hindenburg scandal, the world's fourth richest person, is close to Indian Prime Minister Narendra Modi. Their relationship has recently come under scrutiny.²⁰ **Adani's businesses have greatly benefited from his ties with the government and its liberalisation reforms.** Adani's investments in solar energy are a case in point:

the new mega-projects are all reliant on government support at state or federal level — through auctions for renewable electricity by state governments or state-owned companies. Adani Green's latest annual report puts it bluntly: 'We believe the biggest catalyst for our sector is outside our Company. In two words: "Indian government".' Gautam Adani, the conglomerate's boss and, prior to the Hindenburg scandal, the world's fourth richest person, is close to Indian Prime Minister Narendra Modi. Their relationship has recently come under scrutiny. Adani's businesses have greatly benefited from his ties with the government and its liberalisation reforms. Adani's investments in solar energy are a case in point: the new mega-projects are all reliant on government support at state or federal level – through auctions for renewable electricity by state governments or state-owned companies. Adani Green's latest annual report puts it bluntly: 'We believe the biggest catalyst for our sector is outside our Company. In two words: "Indian government".'²¹

Adani Green has grown very rapidly. While its installed capacity was still less than 1GW in March 2020, it had reached 5GW by 2022, and will likely reach 25GW in 2025.²² The growth rate is even more dramatic when it comes to market value, reflecting the highly speculative nature of India's renewable energy boom. The stock price jumped almost 3,000 per cent between the time Adani Green went public in 2018 and October 2023.²³ There was even a peak at the beginning of 2022, when Adani was in theory worth 3,000 times more than it was in 2018.²⁴ To the shock of many onlookers, the accusations of fraud and market manipulation have seemingly had little impact on long-term investor confidence in the firm,²⁵ with Total recently signing a deal with Adani Green.²⁶

Indian authorities and corporations such as Adani Green have opted to develop large-scale wind or solar parks to meet the needs of industrialists or provide electricity to state grids through a single connection point (as opposed to decentralised models).²⁷ Developing these massive installations requires thousands of hectares of land. **Adani Green's projects have been marred by controversy over allegations of land grabbing and conflicts with farmers and traditional communities — exactly the same conflicts that have come up in the past in relation to coal or hydro developments.**²⁸ In that sense, the development of renewable energy in India does not entail any kind of shift from the past. Even worse, the rapid pace of solar and wind development, and the fact that investors and regulators see these projects as 'virtuous', are further weakening the processes for assessing the projects and their impacts and ensuring adequate compensation for those affected by them.²⁹ Indeed, **the Modi government introduced regulation changes in 2020 to essentially exempt solar parks from standard norms,** such as public hearings and environmental impact assessments.³⁰

The Kamuthi solar park in Tamil Nadu was completed in 2016 and was at one point the largest solar park in the world, built on 2,000 hectares of land (including reclassified wetlands).³¹ 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.³² The company then turned to desalination of

groundwater, but has been accused of dumping the toxic saline residues on the land.

Land conflicts have also erupted in Rajasthan, where the state government has earmarked thousands of hectares of land it claims to own for solar projects — land that traditional communities claim to use and inhabit.³⁴ These communities have turned to the State's Supreme Court to halt the projects.³⁵

Adani Green also came under fire in June 2022 for the award of a wind project in Sri Lanka. Some officials claimed the project was given to the company, without due process, by the former Sri Lanka president, who since had to flee the country following a popular revolt.³⁶

In 2020, French oil major TotalEnergies acquired 20 per cent of Adani Green. This deal allowed TotalEnergies to add 1GW of solar to its energy mix, and this share is bound to grow significantly in the coming years as Adani Green's mass of new renewable projects come on line.³⁷ This can be seen as a way for Adani to cash in on its solar portfolio by selling it to other corporations in need of greenwashing. A similar deal was passed in 2022 with an Abu Dhabi-based company.³⁸ TotalEnergies also has partnerships with Adani in the gas/LNG sector and for the development of green hydrogen.³⁹

CORE CONTROVERSIES

- **Parent company Adani Group has been accused of massive fraud and market manipulation.**
- **Parent company Adani Group used shares in Adani Green to finance coal projects.**
- **The company's stock price is volatile, jumping more than 3,000 per cent since Adani Green went public in 2018, and since 2022 has been more erratic. These fluctuations show the extent to which Adani Green is entangled with the financial sector.**
- **The close relationship between CEO Gautam Adani and Indian Prime Minister Narendra Modi has come under scrutiny.**
- **Adani Green's solar investments are highly dependent on government support.**
- **The Modi government has exempted solar parks from public hearings and environmental impact assessments.**
- **Adani Green's projects are associated with land grabbing, including wetlands and land claimed by traditional communities, depleting aquifers, poisoning land and conflicts with farmers.**

ENDNOTES

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PROFILE 2

BRITISH

GAS

(Centrica plc)

HEADQUARTERS Windsor, United Kingdom

- MAIN SHAREHOLDERS**¹
- Jupiter Asset Management Ltd — 1.88%
 - Threadneedle Asset Management Ltd — 1.73%
 - Chris O’Shea — 1.67%
 - Permian Investment Partners LP — 1.54%
 - BlackRock Investment Management (UK) Ltd — 1.30%
 - Merrill Lynch International (Investment Management) — 1.26%
 - Jennison Associates LLC — 1.12%
 - The Vanguard Group, Inc. — 1.10%
 - Barrow, Hanley, Mewhinney & Strauss LLC — 1.04%
 - SSgA Funds Management, Inc. — 0.86%
- Centrica is the only shareholder, all investors below are listed under Centrica PLC.*

- PROFITS**
- US\$4.07 billion in 2022
 - US\$12.48 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$5.55 for CEO Chris O’Shea (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$0.07 billion in dividend payouts in 2022; US\$2.67 billion between 2016 and 2022
 - US\$0.05 billion in share buybacks in 2022; US\$0.05 billion in share buybacks between 2016 and 2022³

RENEWABLE GENERATION 12GW of renewable capacity under contract in Europe as of 2022⁴

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (£ BILLION)	3.31	0.95	0.45	0.90	1.39	1.25	1.52
NET PROFIT (US\$ BILLION)	4.07	1.31	0.57	1.15	1.85	1.55	1.97
DIVIDENDS (£ BILLION)	0.06	0.00	0.00	0.47	0.55	0.46	0.53
DIVIDENDS (US\$ BILLION)	0.07	0.00	0.00	0.60	0.73	0.57	0.69
SHARE BUYBACKS (£ BILLION)	0.04	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$ BILLION)	0.05	0.00	0.00	0.00	0.00	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

British Gas was founded as the Gas Light and Coke Company in 1812.⁵ It was the first public utility company in the world and for most of its history, it was owned by the UK government, until Prime Minister Margaret Thatcher's administration privatised it in 1986.⁶ Today, it is the main subsidiary of a company named Centrica plc.⁷

UK households seeking to buy electricity would be forgiven for thinking that British Gas no longer uses any fossil fuels. The marketing division of the company has inundated the public with materials that promote British Gas as the greenest in the business, claiming that all their 'fixed tariffs are matched 100% with renewable electricity'.⁸

However, British Gas is still very much in the business of supplying fossil fuel-derived gas to consumers — indeed it supplies just over a quarter of the 22 million gas connections in the UK.⁹ (It is worth noting here, that 33 per cent of all UK electricity consumption comes from gas¹⁰ — and Centrica's own annual report notes that it produced 39.7 million barrels of oil equivalent in 2021).¹¹

While British Gas supplies 20 per cent of the UK market for electricity,¹² including 1.6 million households with 100 per cent 'green' power packages,¹³ it does not produce large quantities of renewable power. *Which?* magazine pegged the renewable electricity British Gas directly buys from generators at just 0.4 per cent of the company's 2021/2022 fuel mix¹⁴ and even though British Gas' parent company Centrica did previously produce energy from wind farms, it sold off all its wind assets in 2017, mostly to Ørsted.¹⁵ Instead, **British Gas resells electricity produced by other companies and packages it with clever marketing that allows it to claim a higher percentage of renewables than it actually delivers.**

The key to this is the use of Renewable Energy Guarantees of Origin certificates (REGOs), which can be bought and sold on markets much more easily than building new solar or wind facilities. Under the rules issued by the UK Office of Gas and Electricity Markets (Ofgem),¹⁶ British Gas is allowed to supply any kind of electricity (including gas-powered electricity) and repackage it with a REGO certificate to label it renewable.¹⁷ Investigations by competitors like Good Energy show that British Gas was the biggest buyer of such certificates from sources around Europe, purchasing 20.1 million certificates at prices at a little over £1 per customer per year in 2019–2020 and 21 million certificates the following year.¹⁸

Another dubious green marketing tactic British Gas uses is paying for 'carbon offsets'. For example, British Gas offers electricity customers an 100 per cent renewable electricity tariff comprised of 10 per cent biomethane and 90 per cent carbon offsets through a partnership with ClimateCare.¹⁹ But both biomethane and carbon offsets are problematic. Biomethane, which is the anaerobic combustion of food waste and manure, is often derived from livestock operations that are unsustainable.²⁰ Meanwhile, **carbon offsets often involve projects in low-income countries, bound up with mass displacement, land grabs and the creation of monocultures.**²⁰

In 2008 British Gas was accused of greenwashing after running an advertisement that stated that British Gas Zero Carbon was the ‘greenest domestic energy tariff compared to those on the Energywatch website’, a claim it could not back up.²² The Advertising Standards Authority upheld the complaint and told British Gas not to repeat the ad.²³ In 2021, several new complaints were made to the Advertising Standards Authority after British Gas launched an advert that told customers ‘you can go green without the extreme’.²⁴

Over time, British Gas has sold off many of its downstream gas-fired electricity production facilities. This includes the 900 megawatt Langage power plant in Devon and the 2.3 gigawatt South Humber Bank plant in Lincolnshire, sold to Energetický a Průmyslový Holding (EPH), a private company controlled by Czech billionaire Daniel Křetínský.²⁵ Both are still running at full capacity, resulting in no net reduction in fossil fuel emissions.²⁶ In 2020, it sold off Direct Energy, its North American energy business, for US\$3.6 billion to NRG Energy.²⁷

Indeed, British Gas has sourced power from the massive Drax coal plant in North Yorkshire since 2007.²⁸ While Drax has been replacing its coal units with wood burning ones (which it markets as green energy) these units appear to be producing increasingly dangerous levels of particulate air pollution. Indeed, Biofuelwatch estimates that the plant’s pollution levels rose by the equivalent of three million diesel cars between 2008 and 2016.²⁹ Centrica, British Gas’s owner, also holds a 20 per cent share in eight UK nuclear power plants, including Hinkley B, which has yet to dispose of massive quantities of nuclear waste.³⁰

Meanwhile **British Gas is very much still in the business of fossil fuel extraction — buying gas primarily from Norway, Qatar and the US.**³¹ In 2005, British Gas also bought up rights to 60 million tonnes of liquefied natural gas (LNG) from Equatorial Guinea.³² In June 2022, Centrica signed an agreement with Equinor in Norway to buy an extra one billion cubic metres of gas per year.³³ And in August 2022, Centrica signed an US\$8.47 billion agreement with Delfin Midstream in the US to buy LNG in 2026.³⁴ Furthermore, Centrica is also quietly backing fracking — for example, it helped fund an open letter to Lancashire County Council in support of fracking in 2015.³⁵ In August 2022, British Gas reported that it received a £56 million tax rebate for its oil and gas operations in Scottish waters.³⁶

British Gas has slowly been laying off thousands of employees, cutting its workforce to about half of the number it had in 2016, as revenue and profits tumbled.³⁷ A major reduction took place in 2020, with around 5,000 workers let go.³⁸ However, in 2022, the company returned to profitability. Following the onset of the war in Ukraine, British Gas raised energy prices, with the company’s standard variable tariff hiked from £1,277.38 a year to £1,970.56, just three months after the invasion.³⁹ Not surprisingly, **Centrica 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.**⁴⁰

This sparked public outrage, not least because the profit figures were published just two weeks after an undercover investigation by *The Times* (UK) newspaper found that British Gas was employing Arvato, a private debt collector, to break into customers' homes and forcibly install prepayment meters for some of its most vulnerable customers, including a young mother with a four-month-old baby whose energy bills had spiked sevenfold.⁴¹

In late 2022 and early 2023, the company announced a £550 million share buy-back programme with the extra cash it has on hand, effectively taking back approximately 10 per cent of its shares.⁴²

CORE CONTROVERSIES

- **British Gas supplies over a quarter of the UK's gas connections, despite promoting itself as one of the greenest energy companies.**
- **The company advertises 'green power packages' despite buying only 0.4 per cent of its 2021/2022 fuel mix directly from renewable producers, and no longer producing wind power since selling off most of its wind assets in 2017.**
- **British Gas uses Renewable Energy Guarantees of Origin certificates (REGOs) to repackage dirty energy as clean, which is allowed under British regulations.**
- **British Gas continues to invest in and purchase fossil fuels from across the world.**
- **Centrica, British Gas' parent company, supported fracking exploration in the UK and lobbied the County Council in Lancashire, where fracking was being opposed.**
- **Centrica has made huge profits since the invasion of Ukraine, increasing energy bills around seven times, and hired a debt collection agency to forcibly install prepaid meters in some of the most vulnerable customers' homes during the cost-of-living crisis.**

ENDNOTES

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PROFILE 3

E.ON

HEADQUARTERS Essen, Germany

- MAIN SHAREHOLDERS**¹
- RWE AG — 15.00%
 - Canada Pension Plan Investment Board — 7.86%
 - Norges Bank Investment Management — 1.67%
 - DWS Investment GmbH — 1.66%
 - Capital Research & Management Co. (Global Investors) — 1.62%
 - E.ON SE — 1.17%
 - Capital International Ltd — 1.03%
 - The Vanguard Group, Inc. — 0.91%
 - Massachusetts Financial Services Co. — 0.61%
 - Capital Research & Management Co. (World Investors) — 0.59%

- PROFITS**
- US\$2.86 billion in 2022
 - US\$13.68 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$2.28 million for CEO Leonhard Birnbaum (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$1.40 billion in dividend payouts in 2022; US\$7.88 billion between 2016 and 2022
 - US\$0.01 billion in share buybacks in 2022; -US\$0.52 billion in share buybacks between 2016 and 2022³

RENEWABLE GENERATION 20.90 GW, including biomass, as of 2022⁴

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (€ BILLION)	2.73	2.50	1.64	1.54	1.51	1.43	0.90
NET PROFIT (US\$ BILLION)	2.86	2.95	1.87	1.72	1.78	1.54	0.96
DIVIDENDS (€ BILLION)	1.33	1.28	1.23	1.20	0.93	0.65	0.41
DIVIDENDS (US\$ BILLION)	0.07	0.00	0.00	0.60	0.73	0.57	0.69
SHARE BUYBACKS (€ BILLION)	No data	No data	No data	No data	No data	No data	No data
SHARE BUYBACKS (US\$ BILLION)	- 0.01	0.58	- 2.73	- 0.38	0.01	1.54	0.48

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

E.ON was established in 2000 by the merger of VEBA (Vereinigte Elektrizitäts und Bergwerks Aktiengesellschaft) and VIAG (Vereinigte Industrie-Unternehmungen Aktiengesellschaft) — two major German utilities.⁶ Both VEBA and VIAG were founded in the 1920s and have been primarily state owned for much of their history.⁷ Historically, VEBA played a major role in mining coal and fossil fuel power generation.⁸ E.ON continued this tradition in 2002 by buying up the assets of Powergen, which owned several major UK fossil fuel plants such as the 2,000 megawatt Ratcliffe-on-Soar power station and the 1,380 megawatt Connah's Quay power plant.⁹ In 2003, E.ON acquired the assets of Ruhrgas,¹⁰ a German company that pioneered the supply of gas from the Soviet Union (later Russia). E.ON was fined a record €553 million in 2009 for a secret agreement made between Ruhrgas and GDF Suez in 1975 — an agreement stipulating that these firms would not compete against each other in the sale of gas transported by the MEGAL pipeline across southern Germany.¹¹

In recent years, however, E.ON has rebranded itself to focus on renewables and power distribution.¹² In order to achieve this, **in 2016, E.ON spun off its fossil fuel power generation business into a new company named Uniper¹³ (a 2020 Sky News investigation found that Uniper was the third largest producer of carbon emissions in the UK).**¹⁴ A couple of years later, E.ON began the acquisition of Innogy, the renewable energy division of German multinational RWE, to expand its renewable energy portfolio.¹⁵ In 2022, the German government decided to buy Uniper,¹⁶ which presents the German public with the opportunity to demand that their government urgently wind down its fossil fuel operations. Today, E.ON is the second largest supplier of electricity in the UK and ranks in the top four suppliers of electricity in Germany.¹⁷

E.ON helped build and operate the 4 megawatt Blyth offshore wind farm off the Northumberland coast in 2000, the UK's first offshore wind farm.¹⁸ E.ON was also a partner in developing the 60 megawatt Alpha Ventus offshore wind park in the North Sea, 45 kilometres north of the German island of Borkum. This is Germany's first offshore wind farm, and began operations in August 2009.¹⁹

Since then, E.ON has developed a number of offshore wind power projects by taking advantage of the UK government's Renewables Obligation scheme, which was authorised under the Utilities Act 2000.²⁰ This scheme helped finance the construction of the 630 megawatt London Array off the Kent coast, which was the world's largest operational offshore wind farm when it was completed in 2013.²¹ (E.ON had a 20 per cent share in the London Array, later revised to 30 per cent.)²² The Renewable Energy Foundation, an anti-wind farm group, claims that the price guarantees resulted in the London Array receiving a £285 million 'subsidy' in 2020 alone.²³

E.ON also benefited from a similar scheme in Germany called 'einspeisetarif' (feed-in tariffs), instituted in 2000 under the Renewable Energy Sources Act.²⁴ This guaranteed a fixed price for renewable energy production over a given period of time, typically two decades.²⁵ The subsidy was paid for by a surcharge on electricity consumers, which amounted to €24 billion in extra income for all energy suppliers in Germany in 2020.²⁶

Likewise, in the United States, E.ON has developed a number of wind farms in Texas in return for over an estimated US\$784 million in subsidies (largely in the form of tax credits) from the US government over the last 20 years.²⁷ This scheme helped E.ON pay for the 781.5 megawatt Roscoe wind farm, the 458 megawatt Panther Creek wind farm and the 180 megawatt Papalote Creek wind farm.²⁸

In 2009, E.ON was accused of greenwashing for claiming that it was using an 'integrated' technology approach after installing a few solar panels on top of the Ratcliffe-on-Soar coal-fired power station in Nottinghamshire, England.²⁹ The panels were estimated to have saved 6.3 tonnes of CO₂ emissions a year, which works out at less than one millionth of the emissions from the power plant itself.³⁰

In 2019, E.ON claimed that all its 3.3 million customers in the UK were being switched to 100 per cent renewable energy plans.³¹ This marketing claim was based on the fact that under the rules issued by the UK Office of Gas and Electricity Markets (Ofgem),³² E.ON is allowed to label as 'renewable' any kind of electricity (including electricity produced by coal or gas by Uniper) that it supplies to customers if it also pays for Renewable Energy Guarantees of Origin (REGO) certificates.³³ Good Energy, a rival electricity company, summed up the matter succinctly: 'E-ON is moving its customers to a 52% renewable, 48% greenwash tariff' (at the time, E-ON's UK renewable portfolio added up to just 48 per cent of the power that it was selling customers.)³⁴ **An April 2021 report by Baringa estimated that only 49 per cent of E.ON's power was actually renewable.**³⁵

In 2020, E.ON announced plans to go carbon neutral by 2040.³⁶ However, an analysis of company data by Carbon Market Watch revealed that the company was only pledging to convert emissions that it controlled or purchased.³⁷ This was despite the fact that 93 per cent of the company's reported emissions did not fall into either category in 2020.³⁸ For example, the burning of the fuel that it supplies to customers is not included in the target.³⁹

In 2022, E.ON mailed out socks to 30,000 customers who had taken part in an energy saving campaign, stapled together with a suggestion that they could turn down their heating to cut their carbon emissions.⁴⁰ The company was forced to make a public apology for the insensitive nature of the campaign, given that customers were faced with the highest energy bills on record and faced escalating levels of fuel poverty.⁴¹ Months later, **the company declared an annual profit of €2.728 billion (US\$2.86 billion) for 2022.**⁴²

This isn't the first time that E.ON has been accused of poor customer service and backhanded approaches to squeezing more money out of their customers. **The company has often been accused of charging huge (incorrect) bills and of taking legal action against customers, without checking whether they have the correct details or person.**⁴³ This has negatively affected their customers' credit rating, making it hard for them to get loans and forcing them to pay higher mortgage rates.⁴⁴ A quick online search shows pages of legal and

other support sites filled with requests for guidance from people experiencing this problem. In 2023, E.ON was ordered to pay a £5 million fine for poor service by the UK energy watchdog, Ofcom.⁴⁵ Some 500,000 customers were scheduled to receive £4 million of this payout — an average of £8 per customer.⁴⁶

The Ukraine war had an impact on E.ON because of its 15.5 per cent stake in the Nord Stream gas pipeline, worth €1.2 billion in 2022.⁴⁷ After choosing to write off €700 million, the company was still able to post a (relatively) modest profit boost of approximately 10 per cent in 2022.⁴⁸

CORE CONTROVERSIES

- **Instead of closing down its fossil fuel operations, E.ON moved its fossil fuel power generation business to its new company, Uniper. In 2020, Uniper was the third biggest producer of carbon emissions in the UK.**
- **Since 2000, E.ON has taken advantage of public subsidies in Germany, the US (US\$784 million) and the UK (at least £285 million), through use of renewable subsidy schemes.**
- **E.ON has been carrying out a range of greenwashing tactics. In 2019 they falsely told customers that they would receive 100 per cent renewable electricity, despite a 2021 report demonstrating that only 49 per cent of their power production was renewable.**
- **An analysis of E.ON's carbon neutral plans revealed that its 2040 pledge only covers 7 per cent of its emissions, and excludes the burning of the fuel that it supplies to customers.**
- **E.ON made huge profits in 2022, a year when people across the UK were struggling to afford to keep the lights on due to rising energy bills.**

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PROFILE 4

EDF RENEWABLES (EDF Group)

HEADQUARTERS Paris, France

SHAREHOLDER¹ French government, via EDF Group (100%)¹

- PROFITS**
- 2022 profit figures not yet publicly available
 - US\$0.89 billion between 2016 and 2021

TOP SALARIES AND BONUSES Salary and bonus data not listed for CEO Bruno Bensasson

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- 2022 dividend figures not yet publicly available; US\$51 billion in dividend pay-outs between 2016 and 2021
 - 2022 profit figures not yet publicly available; US\$0.00 billion in share buybacks between 2016 and 2021

RENEWABLE GENERATION 11.23 GW of installed capacity as of 2022³

	2022 ³	2021	2020	2019	2018	2017	2016
NET PROFIT (€ BILLION)	No data	0.01	0.10	0.16	0.07	0.16	0.31
NET PROFIT (US\$ BILLION)	No data	0.01	0.11	0.18	0.09	0.17	0.32
DIVIDENDS (€ BILLION)	No data	0.06	0.07	0.07	0.07	0.09	0.10
DIVIDENDS (US\$ BILLION)	No data	0.07	0.08	0.08	0.08	0.09	0.11
SHARE BUYBACKS (€)	No data	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$)	No data	0.00	0.00	0.00	0.00	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

EDF Renewables is a subsidiary of French public electricity company EDF.⁴ EDF was partially privatised in 2004,⁵ but is now, once again, 100% owned by the French state.⁶ EDF is one of the largest producers of nuclear energy globally (with nuclear assets mostly in France and the UK).⁷ EDF originated in the nationalisation of the French energy sector in 1946 following the Second World War.⁸ The French government nationalised and consolidated all the various energy producers and providers (except a few local public-owned distributors) into two integrated companies, Électricité de France or EDF for electricity and Gaz de France (GDF) for gas.⁹ These two firms took responsibility for all stages of energy production, transmission, distribution and supply. This system ended

in the 1990s and 2000s with the EU directives that imposed the liberalisation of energy markets.¹⁰ EDF was corporatised and partly privatised, with the French government retaining 84% of the company's capital.¹¹

In 2022, the French government initiated a complete renationalisation of EDF, but this does not mean that the firm will return to serving the public interest.¹² The renationalisation took place in order to finance more nuclear power plants in France, which was not viable from a market point of view.¹³ It was also a step towards reinforcing the role of EDF as a cheap supplier of electricity for private, for-profit commercial operators, putting the firm at the service of the market (see below). In the medium term, this will likely mean that some of EDF's activities, including renewables, will be partly or entirely divested or spun off into a private company. In spite of a vote in the French Parliament that requested a 'genuine renationalisation' of the company, the government opted to stick to its original plans.¹⁴

EDF Renewables was created in the early 2000s following the acquisition by EDF of a smaller company, SIF Énergies.¹⁵ A 100% subsidiary of EDF, it developed through acquisitions and investments to become a major player in France and internationally.¹⁶ In France, EDF Renewables has responsibility for building and operating the vast majority of the new government-sponsored offshore wind farms, the first of which became operational in 2022.¹⁷ These projects are financed through a guaranteed price mechanism as well as other indirect public support.¹⁸

EDF Renewables is also a major player in the US, where it operates in a much more financialised and dynamic market, where companies buy, sell and exchange wind and solar assets as a result of financial analysis and strategy changes.¹⁹ Both in the US and in the rest of the world outside Europe, most of EDF Renewables' projects are based on Power Purchase Agreements with large corporations such as Google, Amazon, Procter & Gamble and BASF,²⁰ or with governments and public entities.²¹ EDF Renewables is also particularly active in the Middle East (Israel, Egypt, United Arab Emirates, Saudi Arabia).²²

One of EDF Renewables' most infamous renewables initiatives is its wind farm project in the Tehuantepec Isthmus in Oaxaca, Mexico.²³ **Huge wind farms have been developed in the area by energy giants such as EDF to meet the electricity needs of corporate-owned factories in Mexico.**²⁴ These projects have involved taking over community-controlled land from Indigenous communities.²⁵ EDF has been accused of land-grabbing for several projects, and recently pulled out from one particularly controversial project under pressure from local communities and Mexican and French civil society.²⁶

Workers in EDF Renewables do not have the same status as most EDF French workers that were hired before the corporatisation.²⁷ **EDF Renewables' workforce is younger and on more precarious forms of contract, with much more turnover compared to the average EDF Group workforce.** Staff numbers are comparatively smaller in EDF Renewables than in the EDF group as a whole, because its 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, in contrast to other EDF workers.²⁸

Although it has remained largely government owned, EDF has increasingly been accused of behaving just like any other private energy company, particularly outside France. Like Total and Engie, EDF offers many 'green energy' plans to its customers.²⁹ These are largely based on certificates of origin, i.e. on purchasing certificates from others (mostly Scandinavian hydro producers) to put a green stamp on electricity that mostly comes, in the case of France, from nuclear reactors³⁰. In France and other European countries, EDF has been forced — in spite of the will of many of its workers and some of its management — to play the game of the liberalised market, including opaque pricing deals and aggressive canvassing for new customers.³¹

The focus of EDF and of the French government on nuclear energy has fueled much debate and criticism in France, as the increasing costs of maintaining nuclear power plants have been widely seen as the cause of France's slow movement on renewable generation, compared to European peers.³²

In 2022, EDF did not make massive profits like most of the other global energy giants. Its sales are up 70 per cent compared to 2021, but the firm also incurred considerable losses.³³ This is because it has been used by the French government as a means to bail out private providers (by selling them cheap wholesale electricity) and because of ongoing maintenance and repairs in a significant number of its French nuclear power plants, which in turn has forced the company to buy electricity on the markets.³⁴ This electricity was still sold back at the usual lower wholesale tariff to commercial operators.³⁵ Most of the electricity EDF provides to its direct customers in France is still sold at a regulated tariff set by the government, which means the price increases in the context of inflation and the Ukraine war — although significant — have been lower than those of other private operators.³⁶

CORE CONTROVERSIES

- **In 2022, the French government decided to renationalise EDF to finance expensive nuclear power plants and supply cheap power to private, for-profit commercial operators in France.**
- **Most of EDF Renewables' projects are based on Power Purchase Agreements with large corporations or governments.**
- **EDF Renewables has a history of land grabbing allegations associated with their renewables initiatives.**
- **EDF Renewables recently pulled out of a project in Mexico due to public pressure in Mexico and France.**
- **EDF Renewables staff outside France have limited security and are often not unionised.**
- **In the US, EDF Renewables operates similarly to an asset management company.**
- **EDF incurred substantial losses in 2022 as it has been used by the French government to bail out failing private companies.**

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PROFILE 5

ENBRIDGE, Inc.

HEADQUARTERS Calgary (Alberta), Canada

- MAIN SHAREHOLDERS**¹
- RBC Global Asset Management, Inc. — 4.53%
 - 1832 Asset Management LP — 3.28%
 - The Vanguard Group, Inc. — 2.35%
 - RBC Dominion Securities, Inc. — 2.35%
 - TD Asset Management, Inc. — 1.82%
 - BMO Asset Management, Inc. — 1.51%
 - BMO Asset Management Corp. — 1.30%
 - RREEF America LLC — 1.28%
 - CIBC World Markets, Inc. — 1.10%
 - Mackenzie Financial Corp. — 0.94%

- PROFITS**
- US\$1.99 billion in 2022
 - US\$17.98 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$17.23 million for CEO Al Monaco (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$5.41 billion in dividend payouts in 2022; US\$27.95 billion between 2016 and 2022
 - \$0.11 billion in share buybacks in 2022; \$2.83 billion between 2016 and 2022

RENEWABLE GENERATION 2.17 GW capacity as of 2023³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (CA\$ BILLION)	2.59	5.82	2.98	5.32	2.52	2.53	1.78
NET PROFIT (US\$ BILLION)	1.99	4.65	2.24	3.99	1.94	1.87	1.30
DIVIDENDS (CA\$ BILLION)	7.02	6.82	6.61	5.97	4.66	3.56	1.95
DIVIDENDS (US\$ BILLION)	5.41	5.45	4.96	4.48	3.59	2.64	1.42
SHARE BUYBACKS (CA\$ BILLION)⁴	No data	No data	No data	No data	No data	No data	No data
SHARE BUYBACKS (US\$ BILLION)	-0.11	0.00	0.00	0.01	0.02	1.20	1.71

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

Enbridge was originally named the Interprovincial Pipe Line Company when it was founded in 1949.⁵ The firm was established to transport oil and gas between Canadian provinces and to the United States for the Imperial Oil company.⁶ It changed its name to Enbridge in 1998.⁷ Enbridge operates the world's longest crude oil and liquids pipeline system, with 28,661 kilometres of crude oil pipelines and 123,189 kilometres of natural gas pipelines in North America.⁸ Approximately 95 per cent of its income is generated from fossil fuels.⁹

In recent years, however, company executives have stated that they have an interest in investing in renewable energy, especially European wind farms, because of the attractive financial incentives on offer.¹⁰ Enbridge claims that it wants to achieve zero carbon by 2050.¹¹ It has taken minority stakes in the 447 megawatt Rampion offshore wind farm off the coast of England and the 639.45 megawatt Hohe See and Albatros wind projects off the coast of Germany, as well as a number of onshore wind farms in Texas.¹² In France, Enbridge has minority stakes in the 498 megawatt Fécamp offshore wind farm, the 480 megawatt Saint-Nazaire offshore wind farm, and the 450 megawatt Calvados offshore wind farm.¹³ The company has also bought the Sarnia Photovoltaic Power Plant in Ontario and expanded it to 97 megawatts, after the provincial government offered a CA\$0.44 (US\$0.34 at the time) price guarantee,¹⁴ one of the highest in the world.¹⁵

Meanwhile, the company has attracted a lot of opposition to its major pipelines, in particular to the proposed replacement and maintenance of Line 3, which runs from Edmonton in Alberta, Canada, to the Superior Terminal in Wisconsin in the US. This work will increase the capacity of the line, which currently transports 390,000 barrels of tar sands crude oil a day.¹⁶ Opposition is also raised to the poor safety management of Line 5 which runs from the Superior Terminal to Sarnia, Ontario, through the Great Lakes, transporting 540,000 barrels of tar sands crude oil a day.¹⁷ Other controversial pipelines include Line 6B (from Griffith, Indiana, to Sarnia) and Line 9 (from Sarnia to Montreal, Quebec) as well as the Dakota Access Pipeline (from the Bakken Formation in North Dakota to an oil terminal near Patoka, Illinois) in which Enbridge has a 27.6 per cent stake.¹⁸

Critics point to the numerous oil spills from the company's pipelines that have taken place over the years. **Greenpeace analysed data from the US Pipeline and Hazardous Materials Safety Administration to show that pipelines owned by Enbridge and its joint ventures and subsidiaries suffered 307 hazardous liquids incidents between 2002 and 2018 – approximately one spill every 20 days on average.**¹⁹ Two of the biggest spills included 40,000 barrels of oil that spilled from Line 3 in 1991 in Grand Rapids, Minnesota, and a 20,000 barrel tar sands spill from Line 6B into the Kalamazoo River in Michigan in 2010.²⁰

Line 3 involves building new pipelines through Indigenous territories in Minnesota. Whilst Enbridge assured us in their feedback that they consulted Indigenous representatives throughout the process, our own research has shown that Line 3 has also been fiercely opposed by many local tribes.²¹ In 2021, a

consortium of Canada's biggest banks gave Enbridge a CA\$1.5 billion loan to complete Line 3, in part conditional on the company meeting 'sustainability' criteria such as reducing greenhouse gas emission intensity by 35 per cent by 2030.²² **'Giving Enbridge a sustainability loan is like giving a weapons manufacturer a "peace" loan; it's like giving a cigarette company a "health" loan,' says Tara Houska, the founder of Giniw Collective and a member of the Couchiching First Nation Anishinaabe peoples. '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.'**²³

Dozens of protests have taken place against the company in Canada and the US, including numerous efforts to shut down the pipeline via blockades, civil disobedience and lockdowns. A series of articles for the Intercept, as well as the Brennan Law Centre, suggest the company has allegedly fought back by hiring surveillance companies and even coordinating with local police operations against the activists in Minnesota.²⁴ Enbridge confirmed that whilst they did not directly fund local police operations, they did so indirectly, through their funding of an independent account manager (as part of the Public Utilities Commission requirement to fund a Public Safety Escrow Account) who made financial decisions and allocated funds to local police enforcement.²⁵

Meanwhile, Line 5, almost 70 years old, runs through the Straits of Mackinac, which connect Lake Michigan to Lake Huron.²⁶ A 2016 report to the US Congress showed that the pipeline was missing bottom anchors that should hold it in place in 16 major locations, including one place in which an 87 metre length of the 76 centimetre wide pipeline was unsecured.²⁷ **Engineering experts say that Line 5 is 'one peak current event' away from failure that could contaminate over 1,100 kilometres of the shoreline of the Great Lakes.**²⁸

In an effort to bolster public support for Line 5, Enbridge ran an advertisement in 2019 that showed Eric Anderson, an oceanographer with the government's National Oceanic and Atmospheric Administration (NOAA)'s Great Lakes Environmental Research Laboratory, under a headline reading: 'We're working to protect Michigan's water'.²⁹ In fact neither Anderson nor the NOAA had given Enbridge permission to use Anderson's image in their advertising. The company was forced to apologise and withdraw the ad.³⁰

Gretchen Whitmer, the governor of the state of Michigan, ordered the company to cease operations by May 2021 following a state review that found the Line 5 petroleum pipeline is putting the Great Lakes at risk.³¹

The company has refused to do this and the matter is now being fought in the courts.³² The lawsuit aiming to remove Line 5 is being supported by a coalition of more than 60 Tribal Nations.³³ Meanwhile, activists have also been fighting Enbridge by filing shareholder resolutions against the company's financial backers such as the Royal Bank of Canada.³⁴ Unfortunately for the activists, the new Inflation Reduction Act that the US Congress passed in 2022 provides expedited permitting for natural gas pipelines, which may help Enbridge get its way.³⁵

CORE CONTROVERSIES

- **Enbridge operates the longest crude oil and liquids pipeline system in the world.**
- **In recent years, Enbridge has started to invest in renewable energy due to the attractive financial incentives on offer.**
- **The opposed replacement of its Line 3 will involve building through Indigenous territories.**
- **There has been approximately one spill from Enbridge's pipelines every 20 days between 2002–2018.**
- **Its Line 5 has been shown to be missing critical anchors to hold it in place, posing the possibility of huge environmental catastrophe.**
- **In 2021, Enbridge received a CA\$1.1 billion loan from Canada's biggest banks to complete Line 3. This loan was in part conditional on the company meeting 'sustainability' criteria.**
- **The company is currently in the courts for failing to cease all operations on its Line 5 pipeline when ordered to do so by the Michigan governor.**

This report was shared with Enbridge before publication. Some adjustments were made following their response.

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PROFILE 6

ENDESA
(Enel Iberia
S.R.L.)

HEADQUARTERS Madrid, Spain

- MAIN SHAREHOLDERS**¹
- Enel S.P. A. — 70.10%
 - The Vanguard Group, Inc. — 0.30%
 - Thornburg Investment Management, Inc. — 0.18%
 - Geode Capital Management LLC — 0.08%
 - JPMorgan Asset Management (UK) Ltd — 0.07%
 - American Century Investment Management, Inc. — 0.05%
 - Pacer Advisors, Inc. — 0.04%
 - Nordea Investment Management AB (Denmark) — 0.03%
 - Endesa, S.A. — 0.02%
 - FIL Investments International — 0.02%

- PROFITS**
- US\$2.67 billion in 2022
 - US\$10.89 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$2.60 million for CEO José Damián Bogas Gálvez (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$1.76 billion in dividend payouts in 2022; US\$12.60 billion between 2016 and 2022
 - US\$0.00 in share buybacks in 2022; US\$0.00 in share buybacks between 2016 and 2022

RENEWABLE GENERATION 9.29 GW of installed capacity as of 2023³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (€ BILLION)	2.54	1.44	1.39	0.17	1.42	1.46	1.41
NET PROFIT (US\$ BILLION)	2.67	1.70	1.58	0.19	1.68	1.58	1.49
DIVIDENDS (€ BILLION)	1.68	1.52	2.13	1.56	1.51	1.46	1.41
DIVIDENDS (US\$ BILLION)	1.76	1.80	2.43	1.75	1.78	1.58	1.50
SHARE BUYBACKS (€ BILLION)⁴	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$ BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

Endesa was founded in November 1944 by the fascist-controlled Spanish government under the name of Empresa Nacional de Electricidad, S.A. (National Electricity Company).⁴ By forming the company, the military dictatorship that was ruling Spain sought to gain control of a strategic sector that was at the time led by private actors.⁵

Endesa was privatised in the late 1980s. Yet the firm has maintained its ties with political power. Many senior politicians from both the social democratic party (PSOE) and conservative party (PP) have assumed official positions within Endesa, its subsidiary firms and its Italian parent company Enel.⁶ **The revolving door between Endesa and the government is one reason why the company has always been such an influential actor in Spain.** Endesa, alongside Iberdrola and Naturgy, make up a so-called 'energy oligopoly' because of their hegemonic position.⁷

In 2009, Enel reached an agreement with Acciona, the previous majority shareholder of Endesa, to purchase the entirety of its shareholding.⁸ Enel subsequently became the main shareholder, with 92 per cent of share capital.⁹ In 2014, following a public offering, Enel's stake was reduced to 70.14 per cent.¹⁰ In July 2016 Endesa increased its shareholding in Enel Green Power (EGP) — the fourth largest operator in the Spanish renewable energy sector — from 40 per cent to 60 per cent.¹¹ Now EGP is a subsidiary of Endesa.¹² As part of Enel and an EGP parent company, Endesa tries to portray itself as a green and modern company.¹³ However, **it still has a large share of fossil and nuclear capacity in Spain.**¹⁴

Endesa has often been criticised for its role in Spain's high levels of energy poverty.¹⁵ Energy poverty rates have increased more than in any other EU country in recent years: almost 11 per cent of households were unable to heat their homes adequately in 2020, a 7.5 per cent increase on the previous year.¹⁶ **Activists such as the Alliance Against Energy Poverty argue that Endesa's practices are a key factor driving this trend, pointing to their rising profits and their tendency to cut off electricity access to vulnerable households.**¹⁷

Endesa has received multiple warnings, complaints and fines in Spain. In May 2019, the National Commission on Stock Markets (CNMV) fined Endesa €5.8 million.¹⁸ **The CNMV concluded that Endesa, alongside Naturgy, manipulated the electricity market to increase wholesale prices between October 2016 and January 2017, coinciding with a peak in demand due to cold weather.**¹⁹ Paradoxically, a decade before, in 2005, Endesa criticised its competitors — Iberdrola, Gas Natural, Unión Fenosa and Viesgo — on the same grounds.²⁰

In addition, Spain's market regulator CNMC fined EGP €4.9 million for unduly taking up capacity at two nodes on the power grid to the detriment of other firms seeking shared access to the same nodes.²¹ EGP was supposed to act as the representative of all interested renewable energy producers. Instead, according to CNMC, EGP 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 nodes.²²

Endesa's activities in Latin America have attracted allegations of devastating social and environmental harm. Hydroelectric dams including São Luiz do Tapajós, Brazil;²³ Ralco HEP and Bio Bio Watershed, Chile;²⁴ El Quimbo, Colombia;²⁵ El Chaparral, El Salvador;²⁶ and Palo Viejo, Guatemala²⁷ have been subject to legal challenges, and protests by Indigenous communities, concerning environmental destruction, loss of livelihoods and displacement. Allegations and potential impacts include land dispossession, displacement, human rights violations, food insecurity, flooding, destruction or harm to livelihoods, cultural practices and sacred sites, as well as environmental degradation, such as biodiversity loss, water and air pollution, soil erosion, deforestation and desertification.²⁸

In Mexico, the Ixtepec community is opposing private wind farms and proposes their own wind farm cooperative as an alternative, claiming energy sovereignty for their territory.²⁹ At the Solar Park Villanueva project in the desert of Viesca (754 MW), Mexico, workers from subcontracted Mexican companies are protesting and blocking the plant's entrance, demanding that their salaries are paid.³⁰ 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.³¹

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 Enel-owned Osage wind project, due to the alleged lack of local consent, destruction of habitats and sacred sites and illegal mining on Osage territory.³²

Endesa is reliant on public funds. Through Enel, the company had access to the European Central Bank's quantitative easing policy, named the Corporate Sector Purchase Programme (CSPP). The CSPP has financed Enel Finance Intl N.V. and Enel S.p.A. in 26 operations.³³ The Bank would have acquired more than US\$36 billion of Spanish corporate bonds but it does not publish the amount of money in each operation.³⁴ In addition, Endesa aims to mobilise US\$27.5 billion through the NextGenerationEU recovery funds.³⁵ The plan is to use these funds for an estimated 122 projects,³⁶ predominantly focusing on renewable energies, smart networks, transport, energy efficiency and retrofit, green hydrogen, energy storage and flexibility, and the conversion of coal-fired power plants.³⁷

Finally, Endesa appears to have benefited substantially from the war in Ukraine. **In 2022, its net income increased by almost 60 per cent compared to the previous year** (see above figures). Endesa says that the additional net income of almost US\$1 billion is because of the 'good performance of the gas business and the high performance of the combined cycle plants'.³⁸ Yet these figures likely have some connection to record high electricity prices and the windfall profits that the company accumulated.

CORE CONTROVERSIES

- **Since privatisation, there has been a revolving door between Spain's two major political parties and Endesa.**
- **Endesa has often been criticised for contributing to energy poverty due to its rising profits and tendency to cut off electricity access to vulnerable households.**
- **In 2019 Endesa was fined for manipulating energy markets to increase wholesale prices (and therefore profits).**
- **Endesa's subsidiary was fined for not fulfilling its responsibility to act as the representative of all renewable energy producers but prioritising its own interests at the expense of other firms.**
- **Endesa's dams in Latin American countries have allegedly jeopardised Indigenous and other local people's livelihoods by causing flooding and displacement, resulting in a number of legal challenges.**
- **Workers from Endesa's subcontracted companies have been protesting at one of its solar plants in Mexico, demanding that their salaries are paid.**
- **Endesa aims to mobilise US\$27.5 billion in public support through the NextGenerationEU recovery funds.**
- **Endesa has recorded substantial increases in profits during the Ukraine war, with its net income increasing by 60 per cent from the previous year.**

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PROFILE 7

ENGIE SA

HEADQUARTERS La Défense, France

- MAIN SHAREHOLDERS**¹
- Government of France — 23.64%
 - Caisse Des Dépôts & Consignations (Investment Management) — 4.61%
 - Norges Bank Investment Management — 1.98%
 - Capital Research & Management Co. (World Investors) — 1.50%
 - Wellington Management Co. LLP — 0.62%
 - ENGIE — 0.60%
 - Capital International Ltd — 0.59%
 - MFS International Singapore Pte. Ltd — 0.54%
 - ARGA Investment Management LP — 0.35%
 - J.P. Morgan Asset Management (UK) Ltd — 0.32%

- PROFITS**
- US\$0.23 billion in 2022
 - US\$6.21 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$3.33 million for CEO Catherine McGregor (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$3.58 billion in dividend payouts in 2022; US\$15.10 billion between 2016 and 2022
 - US\$0.00 in share buybacks in 2022; US\$1.37 billion in share buybacks between 2016 and 2022

RENEWABLE GENERATION 37.90 GW installed renewable capacity, including hydro, as of 2023³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (€ BILLION)	0.22	3.66	- 1.54	0.98	1.03	1.42	- 0.42
NET PROFIT (US\$ BILLION)	0.23	4.32	- 1.75	1.10	1.22	1.54	- 0.44
DIVIDENDS (€ BILLION)	3.41	2.07	1.29	0.00	2.72	1.70	2.42
DIVIDENDS (US\$ BILLION)	3.58	2.44	1.47	0.00	3.21	1.84	2.57
SHARE BUYBACKS (€ BILLION)⁴	0.00	0.00	0.00	0.00	1.03	0.14	0.00
SHARE BUYBACKS (US\$ BILLION)	0.00	0.00	0.00	0.00	1.22	0.15	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

Engie originated in the nationalisation of the French energy sector in 1946, following the Second World War.⁴ The French government nationalised and consolidated multiple energy producers and providers into two integrated companies: Électricité de France (EDF) for electricity and Gaz de France (GDF) for gas.⁵ These utilities were charged with responsibility for all stages of production, transmission, distribution and supply.⁶

This system ended in the 1990s and 2000s with EU directives imposing the liberalisation of energy markets.⁷ Gaz de France was corporatised, partly privatised and, in 2006/2007, merged with Suez, a French-Belgian holding company that was active in the water and waste sector and held energy assets in Belgium.⁸ The result of the merger, GDF Suez, was renamed Engie in 2015.⁹

The recent history of Engie has been one of unpredictable strategy changes, with the only consistent trend being regular payouts to shareholders to the tune of billions of euros (see financial data above). At the turn of the 2010s, GDF Suez, in a bid to expand internationally, acquired International Power,¹⁰ a British-based company that owned multiple old polluting assets, including many coal plants.¹¹ Yet in 2015, as the French hosts of the Paris Climate Conference were facing criticism for accepting sponsorship from Engie and other big carbon emitters,¹² Engie changed its approach completely and decided to focus on renewable energy.¹³ It began divesting from the coal assets it had recently acquired, in most cases selling them to third parties.¹⁴ This meant there was no benefit for the climate, only for Engie's public image. In 2019, Engie offloaded some of its liquefied natural gas assets to Total and was preparing to sell its stake in GRTgaz, the French gas network operator.¹⁵ This, however, did not happen. In yet another strategy turn, the company chose to renew its focus on gas, while selling off its energy services to French construction giant Bouygues (under the name Equans) and selling its stake in Suez to Veolia.¹⁶

The French state's share in the company has been progressively reduced to 23.6%.¹⁷ Before the COVID-19 crisis, the government was actively looking to sell its remaining shares in Engie, but this plan seems to have been put on hold while Engie undergoes yet another significant restructuring.¹⁸

While Engie's public communication is almost 100% focused on renewable energy, gas remains central to its business, as evidenced by the recent leadership changes — chairman of the board Jean-Pierre Clamadieu is an ardent supporter of fracking and used to be the CEO of petrochemical company Solvay, while CEO Catherine McGregor comes from the oil services sector.¹⁹ Even before the war in Ukraine, Engie was a major player in the import of fracked gas from the US.²⁰ The company is now advocating for more gas investments in France and Europe.²¹

At the end of 2022, Engie owned around 38GW capacity in renewables, but more than half of this came from large hydro, mainly in South America.²² These investments date from the end of the 2000s, when the company tried to cash in on the dam-building spree in the Amazon. **Engie is responsible for the infamous Brazilian Jirau dam, close to the border with Bolivia, the site of**

workers' revolts, numerous allegations of human and Indigenous rights abuse and catastrophic flooding.²³ The company's close relationships with Brazilian authorities are now being used to build large-scale wind projects in the country, using the same financing model as its hydro operations.²⁴

Chile is another key country for Engie. Here, the company is slowly divesting from its coal assets to invest in large-scale solar and hydrogen to provide energy for the mining sector and for export.²⁵ This same focus on large-scale renewables for industrial users can be found in many of its projects in Africa (Egypt and Morocco) and South America. **In Morocco, the company is closely allied with companies linked to the royal family,²⁶ and is allegedly involved in projects that encroach on occupied Western Sahara territory.²⁷** In Mexico, Engie has recently been accused of land and resource grabbing for a solar project.²⁸

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.²⁹ Most of the French projects are small-scale, except large offshore wind farms which have been challenged by small-scale fishermen as a form of 'privatisation' of the sea.³⁰ Some of the largest onshore projects, including a large solar project in south west France, have been criticised for deforestation and for prioritising corporate interests.³¹

Alongside the two other French energy giants, EDF and Total, Engie has used its financial firepower to absorb or muscle out most potential competitors (see above, r.e. Solariredirect), with French legislation not allowing for the development of local, nonprofit, public or cooperative producers or distributors as was the case in Germany.³² As a result, the three corporate giants wield considerable influence over the energy transition and its pace — and have secured considerable benefits in the process. **They have even taken over the renewable energy trade association & lobby, Syndicat des énergies renouvelables (SER).**³³

Like Total and EDF, Engie offers many 'green energy' plans to its customers in France and Belgium. Yet these are largely based on certificates of origin, i.e. on purchasing certificates from others (mostly Scandinavian hydro producers).³⁴ These certificates put a green stamp on electricity that mostly comes, in the case of France, from nuclear reactors.³⁵

In response to rising energy prices, Engie claims to participate in various measures and initiatives to ease the burden for consumers and small businesses, but these are mostly government-initiated programmes.³⁶ **In 2022, Engie's turnover reached €93.9 billion, an increase of over 60 per cent compared to 2021.** Moreover, its profit from energy sales surged from €2.9 billion in 2021 to €5.2 billion in 2022, but this was almost cancelled by significant losses due to the depreciation of its nuclear business in Belgium and its stake in the Nord Stream 2 pipeline project.³⁷ This is mostly due to its gas businesses in Europe, but also to some extent because of the higher prices charged for the renewable electricity it produces.³⁸ Engie may be affected by the 'solidarity contribution'

announced by the EU Commission on nuclear and renewables producers,³⁹ but it is unclear to what extent the implementation of the contribution will vary between countries. The 'regulated gas prices' Engie offered, which continued in France post-liberalisation, were terminated on 1 July 2023, which means the gas market will be entirely liberalised and French consumers now take the full brunt of energy price increases.⁴⁰

Engie's business model is highly dependent on public subsidies. As a developer of solar, wind and hydro projects, Engie benefits from the various schemes introduced by governments to accelerate the energy transition, guaranteed purchase prices and price support mechanisms (as in France) or other forms of subsidies.⁴¹ Moreover, Engie often receives financing from public banks, such as BNDES in Brazil,⁴² EIB⁴³ or EBRD⁴⁴ in Europe. In France, Engie has benefited from several of the emergency support mechanisms put in place by the government in response to the COVID-19 crisis, particularly 'chômage partiel', a system by which the state paid up to 80 per cent of the wages of some workers.⁴⁵ During that time, it also received support from the European Central Bank through its emergency corporate bonds purchase programme.⁴⁶ Besides, it also received support for some projects through the European Central Bank recovery plan, both directly (for green gas and hydrogen) and indirectly (as a key beneficiary of some of the renovation schemes).⁴⁷

CORE CONTROVERSIES

- **Engie's priorities have constantly shifted throughout the privatisation era, while the focus on providing billions of euros to shareholders has remained consistent.**
- **Engie has begun to sell its coal and gas assets, meaning that the same amount of emissions will be produced but now by other companies.**
- **Engie uses greenwashing tactics, promoting itself as renewable despite fossil gas, including from fracking, being central to its operations.**
- **Engie's infamous Jirau dam in Brazil has been implicated in workers' revolts, allegations of Indigenous and other human rights abuse, and flooding.**
- **Engie's large-scale renewable projects prioritise industrial users (with limited local benefit) and are associated with resource grabbing and environmental destruction.**
- **Engie continues to benefit from public subsidies, eaching record profits while consumers struggle to pay their bills.**

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PROFILE 8

IBERDROLA

HEADQUARTERS Bilbao (Basque Country), Spain

- MAIN SHAREHOLDERS**¹
- Qatar Investment Authority (Investment Management) — 8.71%
 - Norges Bank Investment Management — 3.62%
 - The Vanguard Group, Inc. — 3.29%
 - Schroder Investment Management Ltd — 0.70%
 - FIL Investments International — 0.61%
 - Geode Capital Management LLC — 0.55%
 - Wellington Management Co. LLP — 0.54%
 - Massachusetts Financial Services Co. — 0.52%
 - J.P. Morgan Asset Management (UK) Ltd — 0.47%
 - Capital Research & Management Co. (Global Investors) — 0.43%

- PROFITS**
- US\$4.57 billion in 2022
 - US\$26.83 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$13.73 million for CEO José Ignacio Sánchez Galán (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$3.39 billion in dividend payouts in 2022; US\$19.85 billion between 2016 and 2022
 - US\$1.25 billion in share buybacks in 2022; US\$7.88 billion in share buybacks between 2020 and 2022

RENEWABLE GENERATION 41.25 GW in installed capacity as of 2023³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (US\$ BILLION)	4.57	4.60	4.13	3.82	3.56	3.17	2.99
DIVIDENDS (US\$ BILLION)	3.39	3.42	3.10	2.89	2.67	2.27	2.21
SHARE BUYBACKS (US\$ BILLION)	1.25	1.36	1.96	1.28	0.89	0.47	0.67

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/> yearly-average-currency-exchange-rates

Iberdrola is a leading energy multinational based in Spain. The company was established through the merger of Hidroeléctrica Española and Iberduero in 1992.⁴ Hidroeléctrica Española consolidated its power in the midst of Spain's fascist dictatorship. General Franco offered preferential treatment to Hidroeléctrica Española to compensate director Oriol Urquijo for his support of the coup d'état against the Spanish Democratic Republic in 1936.⁵ Between 1948 and 1960, Hidroeléctrica Española multiplied its net assets twenty-fold.⁶

Iberdrola is now one of the world's biggest electricity utilities in terms of market capitalisation.⁷ The company's history and present-day influence make its power omnipresent in the Spanish electricity sector — and in the global electricity industry. Many prominent Spanish politicians have occupied positions on the company's Board.⁸ On its website, the multinational highlights a turning point in 2006, when 'the company decided not to follow the general trend of diversifying its business and investment in sectors such as telecommunications, but to focus on the energy sector, where they invested in generation and grids in Spain, Mexico and Brazil.'⁹ However, **in 2022, 46 per cent of the electricity Iberdrola produced still involved either fossil gas or nuclear energy.**¹⁰

Capitalising on public subsidies is at the heart of the company's strategy. It received a €550 million green loan from the European Investment Bank for the construction of a total capacity of around 1,800 megawatts of photovoltaic and wind farms.¹¹ In Mexico, Iberdrola received subsidies worth 56.1 billion pesos (US\$3.11 billion) under the government's 2013 Electricity Industry Law.¹² The company is the leading applicant for NextGenerationEU funds in Spain, aiming to mobilise US\$35.4 billion through the scheme.¹³ Additionally, the company sent a presentation to the Spanish government's National Commission on Stock Markets for a portfolio of 175 projects in areas like green hydrogen, renewable energy, mobility, energy storage, smart grids and heat electrification.¹⁴ Iberdrola also had access to the European Central Bank's Corporate Sector Purchase Programme quantitative easing policy.¹⁵

Iberdrola has faced several accusations of fraudulent practices. **In 2015, the Spanish National Commission of Markets and Competition (CNMC) ruled that the multinational had manipulated the price of electricity in 2013, labelling its malpractice as 'very serious'.**¹⁶ The CNMC imposed a fine of €25 million which is still under appeal.¹⁷

In 2021, Iberdrola was accused of generating a 'false drought' by emptying the Valdecañas reservoir in Extremadura, Spain, rendering tanker trucks necessary to supply water to the surrounding population.¹⁸ Iberdrola claims that this action was necessary to generate electricity in the context of a heat wave.¹⁹ However, it did so when the price of electricity was very high, bringing in profits that prompted an investigation by the Ministry for Environment.²⁰ Recently, the High Court of Justice in Extremadura has ruled that Iberdrola must shut down 60 per cent of its 500 MW Nuñez de Balboa photovoltaic solar plant, because it occupies a piece of land that was illegally expropriated.²¹

Iberdrola was also involved in a long-running investigation around the deployment of espionage work by José Manuel Villarejo, former Commissioner of the National Police Corps.²² Allegations include the deployment of Villarejo by Iberdrola CEO José Ignacio Sánchez Galán to infiltrate a local movement opposing Iberdrola power station in the town of Arcos de la Frontera, Spain, and to spy on the CEO of the rival company, Endesa, Manuel Pizarro.²³ This case took a considerable amount of time to process and has now been closed, due to 10 years passing since the initial incidents.²⁴

In the international arena, Iberdrola has been publicly criticised by Mexican President Andrés Manuel López Obrador for organising a campaign against the reform of the Mexican electricity market.²⁵ Iberdrola would be one of the main parties affected by López Obrador's project, which aims to stop the privatisation process that began in 2013 and limit private participation in electricity generation to 46 per cent.²⁶

This conflict, which has led to a new diplomatic clash between Spain and Mexico, was preceded by the imposition of a fine of 9.1 billion pesos.²⁷ The Energy Regulatory Commission of Mexico accused Iberdrola's Mexican subsidiary of misusing the government's self-supply scheme, using this to sell energy to their partners.²⁸ **The struggle between the Mexican state and Iberdrola now threatens the next wave of Investor-State Dispute Settlement (ISDS) cases in the renewable energy sector.**²⁹ This conflict has also seen Iberdrola sell US\$6 billion worth of gas assets in Mexico, instead pursuing expansion within the US to take advantage of generous green subsidies provided under the Inflation Reduction Act.³⁰

Iberdrola has been implicated in multiple environmental justice struggles around the globe. For example, the Belo Monte hydroelectric dam, Brazil, has been challenged due to the purported failure to consult affected Indigenous people.³¹ In addition, **multiple wind power projects including in Caetité, Brazil; Oaxaca, Mexico;³² Puebla, Mexico;³³ and the Thousand Islands region of the US have attracted opposition from community groups, local government bodies, environmental organisations and others due to allegations of harmful social and ecological impacts.** Allegations and potential impacts include land dispossession, destruction or harm to livelihoods, crops, biodiversity, landscape and culturally important sites, as well as deforestation, air and water pollution, noise, human rights violations, and increased violence.³⁶

Finally, Iberdrola has signed Power Purchase Agreements with controversial large companies such as Amazon, Apple, Facebook and Nike,³⁷ alongside recent partnerships in renewable energies with Total and Shell.³⁸ It has also sealed agreements with BP, Fertiberia, Cummins, Porcelanosa, Diageo and Foresa around green hydrogen and promoted alliances for electrification and electric mobility with Volkswagen, Renault, Irizar and the smart charging solutions company Wallbox.³⁹ Here, we see Iberdrola working alongside some of the most polluting companies in the world.

CORE CONTROVERSIES

- **Iberdrola is one of the largest energy companies in the world.**
- **Many prominent Spanish politicians have been members of the company's board.**
- **Despite its 'renewable' marketing claims, in 2022, 46 per cent of Iberdrola's energy mix was from nuclear or fossil gas.**
- **Iberdrola received 56.1 billion pesos (US\$3.11 billion) in public subsidies from the Mexican government.**
- **Iberdrola is aiming to mobilise US\$35.4 billion through NextGenerationEU Funds.**
- **In Spain, Iberdrola has been accused of causing a drought by draining local drinking water reserves to generate electricity.**
- **Iberdrola was previously under a long-term espionage investigation due to allegedly infiltrating a local movement opposing an upcoming dam and spying on the CEO of rival company Endesa.**
- **Iberdrola is implicated in multiple environmental justice struggles across the world due to allegations of harmful social and environmental impacts and an alleged lack of consultation of Indigenous and other local people.**

ENDNOTES

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PROFILE 9

JINKO SOLAR HOLDING Co. Ltd

HEADQUARTERS Shanghai, Chinan

MAIN SHAREHOLDERS¹

- Mackenzie Financial Corp. — 4.36%
- Invesco Capital Management LLC. — 3.01%
- Handelsbanken Fonder AB. — 2.98%
- Schroder Investment Management (Hong Kong) Ltd. — 2.92%
- Marshall Wace LLP. — 2.07%
- Snow Lake Management LP. — 1.40%
- Springs Capital (Hong Kong) Ltd. — 1.39%
- Dimensional Fund Advisors LP. — 1.17%
- Greenwood Investments SG Pte Ltd. — 1.14%
- The Vanguard Group, Inc. — 1.08%

PROFITS

- US\$0.09 billion in 2022
- US\$0.71 billion between 2016 and 2022

TOP SALARIES AND BONUSES Salary and bonus data not listed for CEO Xiande Li²

DIVIDEND PAY-OUTS AND SHARE BUYBACKS

- US\$0.00 in dividend payouts in 2022; US\$0.00 between 2016 and 2022
- US\$0.20 billion in share buybacks in 2022; US\$0.53 billion in share buybacks between 2016 and 2022

RENEWABLE GENERATION N/A

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (US\$ BILLION)	0.09	0.11	0.04	0.13	0.06	0.02	0.26
DIVIDENDS (US\$ BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$ BILLION)	0.20	0.00	0.10	0.00	0.00	0.00	0.23

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

** Annual reports from JinkoSolar note that it does not pay dividends, as per company policy: 'We have never declared or paid dividends, nor do we have any present plan to pay any cash dividends on our ordinary shares or ADSs in the foreseeable future.'³ However, on April 22, 2022, Jinko did declare a dividend payment of approximately ¥230.0 million (\$36.09 million) at the exchange rate of US\$1=¥6.3726.⁴

Founded in 2006 to manufacture silicon wafers (semiconductors),⁵ Jinko Solar Holding Co. Ltd, known as JinkoSolar, is now the biggest manufacturer of solar panels in the world.⁶ The firm has delivered over 100 gigawatts worth of panels, approximately one out of 10 in the world, according to the company's own statistics.⁷ Most of JinkoSolar's solar panel factories are in China, but it also has plants in Florida, Malaysia and Vietnam.⁸ It worked on the 1,150 megawatt Sweihan project in Abu Dhabi, which was the largest in the world for about 15 months until a new record was set by a bigger installation in Qinghai, China.⁹

In no small part, JinkoSolar's explosive growth has been assisted by China's support for manufacturing and exporting solar panels that began as early as 2004.¹⁰ In the last decade the Chinese government has pumped over US\$50 billion into subsidising the solar industry,¹¹ and today Chinese companies collectively manufacture over 80 per cent of the panels in the world.¹²

While it is hard to pinpoint all the details of Chinese government support for JinkoSolar, a key event was a 13 billion yuan (US\$1.1 billion) financing package from China Development Bank in 2012.¹³ This happened at a time when many governments around the world were pouring money into national industries to win the battle for market share in the fast-growing renewable energy business — for example, the US government provided US\$535 million and US\$583 million in loan guarantees to Solyndra and First Solar in 2009 and 2011 respectively.¹⁴

Solar industry commentators say that JinkoSolar's greatest subsidy is actually the provision of low-paid manual labour in Xinjiang, which also has the cheap and plentiful power necessary to make the panels.¹⁵ Jinko has a factory in the Xinyuan Industrial Park in Xinjiang province, which also houses a high-security prison and an internment camp for Uyghur Muslims, an ethnic minority in China.¹⁶ According to *In Broad Daylight*, a 2021 report by Sheffield Hallam University, historic satellite images from Google Earth show that Jinko's Xinjiang factory and the prison and detention centre were built at the same time in 2016, only two and a half kilometres apart.¹⁷ This factory produces 42 per cent of the company's ingots and wafers and 54 per cent of the workers are Uyghur Muslims. **Researchers suggest that at least some of these workers have been employed against their will.** The report quotes local government press releases stating that Xinjiang JinkoSolar accepted 78 'registered unemployed personnel' from the Kunas County government in spring 2020 and July 2020.¹⁸ JinkoSolar also buys polysilicon from a company named Daqo Asia Silicon, which is produced by 100 per cent Uyghur Muslim labour in Xinjiang, according to *In Broad Daylight*.¹⁹

In 2011, JinkoSolar was forced to suspend its operations in Haining city in Zhejiang province, west of Shanghai, after over 500 protesters stormed its facilities.²⁰ **The protests followed mass fish deaths in the Mujiqiao river, and allegations that elevated rates of cancer had been found among local villagers.**²¹ Local reports suggest that JinkoSolar was piling up seven to ten tonnes of solid fluoride waste outside the factory every day, and that heavy rains were washing the waste into the river. (Silicon wafers are

dipped in hydrofluoric acid to produce a rough surface that is better able to absorb sunlight, generating the fluoride waste).²²

JinkoSolar has also faced protests outside the country, notably in 2015 when it won a contract to provide 180 megawatts of electricity to the states of Jalisco and Yucatán in Mexico.²³ **The firm decided to build a 250-hectare solar park in Cuncunul and Valladolid in the Yucatán, but failed to consult with the local Mayan population.**²⁴ In February 2019, local residents sued JinkoSolar, citing the potential impacts of the project set out in the environmental impact assessment. This included the deforestation of 206 hectares, destroying habitat for five endangered species (including the ocelot and the Tamandula anteater), 26 species with conservation status and 20 species under special protection. The court ruled in the community's favour and cancelled the project.²⁵

Today, JinkoSolar is well situated to reap billions from the new US Inflation Reduction Act of 2022,²⁶ which includes US\$113 billion for solar and wind tax credits over the next decade.²⁷ While the Act is technically intended to support US-based companies, it offers manufacturing production credits and investment tax credit for non-domestic companies to invest in the US. JinkoSolar already has a 26,012.8 metre (280,000 square feet) solar panel assembly plant in Jacksonville, Florida, that qualifies for this subsidy.²⁸

CORE CONTROVERSIES

- **Critics allege that JinkoSolar is able to keep the production costs of their solar panels down due to cheap labour.**
- **A report by Sheffield Hallam University suggests that JinkoSolar's workforce is partially made up of Uyghur Muslims from an internment camp and prisoners from a high-security prison, both situated in the vicinity of the company's main factory.**
- **In 2012, JinkoSolar received a 13 billion yuan (US\$1.1 billion) financing package from the China Development Bank.**
- **In Haining city (Zhejiang province), a factory has allegedly caused devastating river pollution, resulting in claims of mass fish deaths and raised rates of cancer.**
- **In Mexico, JinkoSolar was sued by the local Mayan population for lack of consultation and projected environmental destruction by their planned 250-hectare solar park.**

ENDNOTES

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PROFILE 10

NEXTERA ENERGY, Inc.

HEADQUARTERS Juno Beach (Florida), United States

- MAIN SHAREHOLDERS**¹
- The Vanguard Group, Inc. — 9.14%
 - SSgA Funds Management, Inc. — 5.44%
 - BlackRock Fund Advisors — 4.78%
 - J.P. Morgan Investment Management — 2.48%
 - Geode Capital Management LLC — 1.79%
 - Norges Bank Investment Management — 1.62%
 - Wellington Management Co. LLP — 1.47%
 - Morgan Stanley Smith Barney LLC — 1.34%
 - Managed Account Advisors LLC — 1.02%
 - Northern Trust Investments, Inc. — 1.00%

- PROFITS**
- US\$4.15 billion in 2022
 - US\$29.34 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$57.8 million in total for 2022: US\$17.4 million for CEO John Ketchum (CEO from March 2022) and US\$40.4 million for James Robo (CEO from January – February 2022) (2022)

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$3.35 billion in dividend payouts in 2022; US\$17.09 billion between 2016 and 2022
 - US\$1.46 million in share buybacks in 2022; US\$4.19 billion in share buybacks between 2016 and 2022

RENEWABLE GENERATION 24 GW of generation in operation as of 2022³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (US\$ BILLION)	4.15	3.57	2.92	3.77	6.64	5.38	2.91
DIVIDENDS (US\$ BILLION)	3.35	3.02	2.74	2.41	2.10	1.85	1.61
SHARE BUYBACKS (US\$ BILLION)	1.46	0.01	- 0.09	1.49	0.72	0.06	0.54

NextEra Energy was originally named the Florida Power & Light Company (FPL) when it was founded in 1925.⁴ In 1984, FPL created the FPL Group Inc. in order to be able to expand through acquiring and creating new companies.⁵ Under this banner, they embarked on a number of failed acquisitions of other power companies such as Entergy in Louisiana,⁶ Central Maine Power Company,⁷ and Constellation Energy Group in Maryland.⁸ However, it was successful in buying energy provider Gexa Energy in Texas, which completed in 2005.⁹ By 2010, FPL needed a rebrand; they changed their name to NextEra Energy in an attempt to highlight their so-called commitment to renewable energy.¹⁰ Their luck didn't

improve, with more failed mergers including Hawaiian Electric Industries in 2016,¹¹ and Oncor Electric Delivery in Texas (which was rejected by the Public Utility Commission in 2017).¹² They eventually had success in 2018, when they bought Gulf Power in Florida from Southern Company for US\$6.5 billion.¹³

The company has around 5 million customers,¹⁴ mostly in Florida, and produces 58 gigawatts of energy a year,¹⁵ of which 17 gigawatts are sourced from 136 wind power projects across North America and Canada,¹⁶ and over 2 gigawatts from 33 solar farm mega-projects.¹⁷ They have also developed an experimental hybrid energy project combining wind, solar PV and battery energy storage in Morrow County, Oregon,¹⁸ and a green hydrogen pilot project in Okeechobee, Florida.

NextEra claims to be one of the world's largest operators of big wind and solar farms.²⁰ **The firm has been accused of undermining efforts by local residents to install their own solar panels and get off the grid.**²¹ Moreover, NextEra still owns and operates multiple fossil fuel plants,²² seven nuclear power plants²³ and gas pipelines in various states.²⁴ It has stated that it plans to sell the pipelines by 2025.²⁵ Two of its subsidiaries are primarily fossil fuel companies: FPL reported that 73 per cent of its energy was derived from gas in 2020, while Gulf Power reported that 98.7 per cent of its energy production was from coal and gas.²⁶

The main reason NextEra's wind and solar portfolio has grown so rapidly is because it has successfully taken advantage of both Wall Street and Washington DC. In a smart business move, the company bought wind turbines from General Electric in 2002 when Enron, the biggest player in the business at the time, went into bankruptcy.²⁷ NextEra then convinced Wall Street banks to lend it money in anticipation of guaranteed Production Tax Credits that subsidised renewable power from wind farms.²⁸ These credits ballooned from US\$100 million in 1998 to US\$600 million in 2004 and US\$4.8 billion by 2018. NextEra used these tax credits to reduce its tax bills and increase profits, alongside selling some of the tax credits to other companies.²⁹ (Solar power also benefits from a similar scheme called the Investment Tax Credit.)

'NextEra may produce wind energy, but its real business is subsidy mining', Robert Bryce, a senior fellow at the conservative Manhattan Institute, told Michigan Capitol Confidential website.³⁰ In order to expand this business, NextEra has sued local communities that get in its way, such as Ellington and Almer Townships in Michigan, which tried to limit the number of wind turbines that could be erected in the area.³¹ The judge ruled against NextEra.³²

The company has also become a hot commodity in the market for so-called 'clean energy' Exchange Traded Funds (ETFs), a stock market investment instrument composed of a basket of investments like stocks or bonds.³³ Some 15 per cent of the US market share of these ETFs are investments in NextEra.³⁴ However, buying ETFs in NextEra does not guarantee that the money goes to renewable projects but, instead, boosts the company's entire portfolio, which includes its gas assets. *Solar Energy Media* describes the ETFs as greenwashing.³⁵

NextEra has been involved in numerous local political controversies, particularly in connection with its deployment of a lobbying firm called the Matrix Group. For example, in 2016 NextEra Energy worked with Consumers for Smart Solar, an ‘astroturf’ group, to oppose campaigns in Florida for local residential solar power. With backing from NextEra, the fake consumer group campaigned to impose fees and other barriers to rooftop solar projects for individual homeowners.³⁶

In 2017 and 2018, when Florida state senator José Javier Rodríguez proposed legislation to allow building owners to install solar panels and sell renewable power to tenants, thereby bypassing utility companies, the CEO of NextEra subsidiary FPL, Eric Silagy, sent a memo to two of the company’s vice-presidents that said: ‘I want you to make his life a living hell ... seriously’.³⁷ (Rodríguez also opposed NextEra’s Turkey Point nuclear plant expansion). The Matrix Group was brought in on a massive effort that, according to an investigation by the *Orlando Sentinel and Floodlight*, included bribing a candidate to help successfully kick Rodríguez out of office in 2020.³⁸

Matrix conducted similar tactics in 2018, on behalf of NextEra, to oust Phillip Stoddard, the mayor of South Miami, who also proposed to allow landlords to install rooftop solar in 2017.³⁹ This time, though, they were not successful in unseating him. In 2019, Matrix helped engineer the secret purchase of The Capitolist, a popular local website in Tallahassee, in order to drum up support for NextEra Energy.⁴⁰ NextEra paid Matrix over US\$14 million in 2018 alone, according to leaked documents.⁴¹

In January 2017, FPL sent suggestions to Ray Rodrigues, a Florida state senator, on language for legislation to restrict the adoption of residential solar power in Florida.⁴² **Weeks after receiving a US\$15,000 donation from FPL, Rodrigues introduced legislation based on the company’s suggestions, according to email exchanges obtained by public interest groups via public record requests.**⁴³ Likewise, in October 2021, FPL sent similar suggestions to state senator Jennifer Bradley.⁴⁴ Weeks after she was given a US\$10,000 donation from NextEra, Bradley also introduced legislation based on the company’s suggestions.

Like many other US utilities, NextEra has tried to pass on costs of nuclear waste clean-up operations. The Florida Supreme Court allowed NextEra to bill rate-payers US\$132 million for the costs associated with the Turkey Point plant on Biscayne Bay,⁴⁶ but a federal court rejected the company’s attempt to get tax refunds for US\$97 million spent on disposal of nuclear waste.⁴⁷

Meanwhile, **NextEra Energy has sought to expand fossil fuel operations when it has the opportunity.** This includes a proposal to build a US\$5.7 billion coal-burning power plant near the Everglades National Park in 2007, which was challenged by civil society and ultimately rejected by the Florida Public Services Commission because of concerns about climate change, cost effectiveness and the failure of NextEra to include energy-reducing conservation measures.⁴⁸ Activists including Earth First! have also fought the company’s 3.75 gigawatt Martin County plant because of its impact on the Barley Barber swamp.

Violation Tracker, a project of national policy resource centre Good Jobs First, estimates that NextEra has accumulated over US\$30 million in fines between 2000 and 2022, with the biggest fine imposed for a February 2008 blackout that shut down power for millions of consumers in South Florida for several hours.⁵⁰ Subsidy Tracker, another 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 2009.⁵¹

NextEra is poised to reap many more billions in the next decade because of the 2022 US Inflation Reduction Act, which includes US\$113 billion for solar and wind tax credits over the next decade, as well as credits for 'green' hydrogen.⁵² The company quietly lobbied for the Act to include significant incentives for companies to develop 'green hydrogen' projects, which are yet to be proven to work on a large scale.⁵³ Soon after the Inflation Reduction Act was enacted into law, NextEra announced that it was planning to apply for federal subsidies to help it invest US\$20 billion in the technology.⁵⁴

CORE CONTROVERSIES

- **NextEra claims to be a leader in solar and wind power, yet two of its subsidiaries are primarily fossil fuel companies.**
- **NextEra still owns and operates multiple fossil fuel plants, having sought to expand fossil fuel operations when it has had the opportunity.**
- **NextEra has worked with an 'astroturf' fake citizen campaign group to oppose campaigns for local residential solar.**
- **NextEra worked with lobby firm Matrix in attempts to oust opposing politicians and secretly bought a local news outlet to guarantee positive media coverage.**
- **The public subsidies that NextEra has received for solar and wind power are estimated at US\$2.9 billion.**
- **NextEra has tried to charge the public to clean up nuclear waste from its operations.**
- **NextEra has accrued millions in unpaid fines for environmental destruction.**

ENDNOTES

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PROFILE 11

ØRSTED

A/S

HEADQUARTERS Fredericia, Denmark

- MAIN SHAREHOLDERS**¹
- Government of Denmark — 50.15%
 - Andel A.M.B.A. — 5.00%
 - CAPFI DELEN Asset Management NV — 4.91%
 - Norges Bank Investment Management — 1.10%
 - FIL Investments International — 0.49%
 - The Vanguard Group, Inc. — 0.49%
 - Swedbank Robur Fonder AB — 0.43%
 - Zürcher Kantonalbank (Investment Management) — 0.42%
 - DWS Investment GmbH — 0.36%
 - Canada Pension Plan Investment Board — 0.34%

- PROFITS**
- US\$2.10 billion in 2022
 - US\$15.25 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$2.68 million for CEO Mads Nipper (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$0.85 billion in dividend payouts in 2022; US\$4.70 billion between 2016 and 2022
 - US\$0.00 in share buybacks in 2022; US\$0.03 billion in share buybacks between 2016 and 2022

RENEWABLE GENERATION 15.50 GW in operation as of 2023³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (DANISH KR. BILLION)	15.00	10.89	16.72	6.04	19.50	20.20	13.21
NET PROFIT (US\$ BILLION)	2.10	1.74	2.51	0.91	3.12	3.03	1.85
DIVIDENDS (DANISH KR. BILLION)	6.05	5.58	5.24	5.02	4.07	3.52	1.02
DIVIDENDS (US\$ BILLION)	0.85	0.89	0.79	0.75	0.75	0.53	0.14
SHARE BUYBACKS (DANISH KR. BILLION)	0.00	0.00	0.06	0.10	0.05	0.00	0.00
SHARE BUYBACKS (US\$ BILLION)	0.00	0.00	0.001	0.01	0.01	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

Ørsted was originally a state-owned company called Dansk Olie og Naturgas A/S (Danish Oil and Natural Gas), also known as DONG.⁴ It was created by the Danish government in 1972 to manage gas and oil resources in the Danish sector of the North Sea.⁵ The Danish electricity market was then opened to competition in 1998.⁶ DONG Energy was created in 2006 as a merger of five power production and distribution companies with state-owned Dansk Naturgas A/S and was expected to compete with other electricity retailers like Vattenfall.⁷ In 2008, DONG Energy announced that it would transform from a fossil fuel-based to a renewable energy company. In 2017 it divested its oil and gas business and changed its name to Ørsted.⁸

In 2006, the state owned almost 80 per cent of the company, but this figure has been gradually reduced to 50.15 per cent today.⁹ **The plan is for the company to become fully privatised by 2025, however there is still significant voter opposition to this.**¹⁰ Until then, the company is functioning just as it might if it were in the private sector — as well as competing for business, it pays private sector salaries and dividends as well as taxes on profits. The company has strategically increased dividend payouts in order to attract new shareholders – and indeed the number of shareholders increased by 67% in 2020.¹¹ The dividends paid to the largest shareholder, the state of Denmark, are viewed as a windfall for the state treasury, while retained profits are used to expand operations, just as in the private sector.¹²

Today, Ørsted claims to be the largest offshore wind builder in the world.¹³ Some of its biggest wind projects include the 1,200 megawatt Hornsea One wind farm,¹⁵ the 1,320 megawatt Hornsea Two farm,¹⁴ and the 2,400 megawatt Hornsea Three (approved in July 2022).¹⁶ These three projects are located many kilometres off the UK coast, in the North Sea.

However, until fairly recently, Ørsted continued using fossil fuels. For example in 2006, DONG Energy proposed to build a 1,600 megawatt coal-fired power station near Greifswald in Mecklenburg-Vorpommern, Germany, and in 2009, it invested in a 1,600 megawatt coal-fired power station in North Ayrshire, Scotland.¹⁷ Also since 2006, DONG Energy has a 25-year contract to import gas from Gazprom in Russia, providing 20 terawatts of gas supplies a year.¹⁸

The company was criticised by Danwatch in 2010 over the social and environmental impacts of the Cerrejón coal mine in Colombia, from which it imports millions of tonnes of coal.¹⁹ **It is alleged that the mine and associated port and railroad were constructed by land grabbing and the forcible removal of the indigenous Wayüu community of Tamaquito, as well as the Afro-Colombian inhabitants of Tabaco in the province of Guajira, beginning in the 1980s, with little or no compensation.**²⁰ According to Dutch NGO PAX, an estimated 3,100 people were killed and at least 55,000 people were driven from their land for the project between 1996 and 2006.²¹

Faced with opposition to its fossil fuel projects, DONG Energy began to close them out, starting with Greifswald and North Ayrshire in 2009,²² followed by a suspension of coal purchases from Cerrejón in April 2016.²³ In 2017, Ørsted

sold off the Laggan-Tormore, Ormen Lange, and Syd Arne gas fields to Ineos (a chemicals giant owned by British billionaire Jim Ratcliffe) for US\$1.05 billion. Ineos continues to operate these assets.²⁴ Ørsted's Russian gas supply was suspended at the end of May 2022 after Denmark refused to pay for the gas in roubles, following Russia's invasion of Ukraine.²⁵

Meanwhile, Ørsted was able to develop a number of offshore wind power projects by taking advantage of various subsidy policies created from the 1990s across Europe, notably in Denmark.²⁶ The 160 megawatt Horns Rev 1, near the Jutland coast of Denmark, built by Elsam (which is now part of Ørsted) was the first large-scale offshore wind farm in the world, built between 2002–2003 with a government-guaranteed price of US\$0.09 per kilowatt hour for 12 years.²⁷ Subsidies also helped pay for the London Array off the Kent coast (DONG Energy held a 50 per cent share, later revised to 25 per cent), which was the world's largest operational offshore wind farm when it was completed in 2013, as well as the Hornsea offshore projects, which are wholly owned by Ørsted.²⁸ The Renewable Energy Foundation, an anti-wind farm group, claims that the price guarantees resulted in Hornsea receiving a £479 million subsidy in 2020 alone, with the London Array apparently receiving a £285 million 'subsidy'.²⁹ **Today, Ørsted is hoping to cash in on the billions of subsidies offered by the 2022 US Inflation Reduction Act, which includes US\$113 billion for solar and wind tax credits over the next decade, as well as for 'green' hydrogen.**³⁰

Ørsted was one of 20 energy suppliers in the UK that were ordered by Ofgem, the national regulator, to correct their Fuel Mix Disclosure statements for overstating the proportion of renewable electricity supplied to their customers.³¹

CORE CONTROVERSIES

- **Ørsted was formed as a merger of six power production and distribution companies in 2006 and now operates as a private entity, with shares and dividends. The Danish government still has a share of 50.1 per cent in the company but full privatisation is looming.**
- **Today it is the largest offshore wind farm builder in the world.**
- **Three of its biggest projects can be found off the UK coast. The Renewable Energy Foundation estimates that two of these projects received a combined £764 million in public subsidies in 2020 alone.**
- **Ørsted purchased coal from the Cerrejón coal mine in Colombia, which is allegedly responsible for land grabs and the forcible removal of tens of thousands of Indigenous and Afro-Colombian people from the area.**
- **Instead of closing down its fossil fuel operations, Ørsted sold off three of its gas fields to chemical giant Ineos for US\$1.05 billion. Ineos continues to operate them.**

ENDNOTES

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PROFILE 12

**SIEMENS
GAMESA
(Siemens
Energy AG)**

HEADQUARTERS Zamudio (Basque Country), Spain

- MAIN SHAREHOLDERS**¹
- SIEMENS AG — 31.91%
 - Siemens Family — 3.00%
 - Norges Bank Investment Management — 1.31%
 - FIL Investments International — 1.31%
 - SIEMENS ENERGY AG — 0.89%
 - Union Investment Privatfonds GmbH — 0.84%
 - DWS Investment GmbH — 0.65%
 - The Vanguard Group, Inc. — 0.59%
 - Schroder Investment Management Ltd. — 0.54%
 - Deka Investment GmbH — 0.48%

- PROFITS**
- US\$0.99 billion in 2022
 - US\$2.36 billion between 2016 and 2022
 - Siemens Gamesa was a loss-making venture in most of the years since it was spun off from its parent company, Siemens, in 2017. The company blamed supply chain struggles, sharp increases in commodity prices, shortages of components, logistics bottlenecks and high transportation costs.² It also faced competition from Chinese manufacturers such as Envision and Goldwind.³ On 14 February 2023, Siemens Gamesa ceased trading as the company was re-absorbed by its main shareholder, Siemens Energy AG.

TOP SALARIES AND BONUSES Total compensation of US\$4.20 million for 2022: US\$1.48 million for Jochen Eickholt; US\$2.72 million for Andreas Nauen (2022)⁴

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$0.00 in dividend payouts in 2022; US\$0.00 between 2016 and 2022
 - US\$0.00 in share buybacks between 2016 and 2022 (Siemens Gamesa announced plans to delist in 2022. As of June 2023, Siemens projected it would spend a total of €4.05 billion to buy back all of the Siemens Gamesa shares.)⁵

RENEWABLE GENERATION N/A

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (€ BILLION)	-0.94	-0.63	-0.92	0.14	0.07	-0.14	0.30
NET PROFIT (US\$ BILLION)	-0.99	-0.74	-1.05	0.16	0.08	-0.15	0.32
DIVIDENDS (€ BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIVIDENDS (US\$ BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	2022	2021	2020	2019	2018	2017	2016
SHARE BUYBACKS (DANISH KR. BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$ BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

** NOTE: we did not include share buyback for Siemens Gamesa in 2022 because it was re-absorbed into Siemens, the original parent company.

Siemens Gamesa was created in April 2017 by merging Spanish firm Gamesa (originally Grupo Auxiliar Metalúrgico S.A) with the Danish firm Siemens Wind Power.⁶ The new company was based in Zamudio, Spain, but was ultimately controlled by Siemens, which is based in Munich, Germany. Siemens Gamesa was the second largest manufacturer of wind turbines in the world.⁷ The company manufactured both onshore and offshore turbines, and made equipment for energy storage and green hydrogen production at its factories in Brazil, China, Denmark, Germany, India, Morocco, Spain, the UK and the US.⁸ Climate activists argued that Siemens Gamesa was simply set up to green-wash Siemens, which is a major manufacturer of equipment for fossil fuel plants such as the newly commissioned Java 9 and Java 10 coal-fired plants in Indonesia.⁹

Gamesa owed its success to the generous subsidies for wind power provided by state governments, notably Denmark and Germany, over the last four decades. As far back as 1976, wind turbines certified by a Danish test centre were given a 30 per cent subsidy support.¹⁰ This support was expanded in 1990 under the Danish Energi 2000 Act as well as in several subsequent acts over the last two decades.¹¹ Likewise, according to a study by the International Institute for Sustainable Development, Germany will spend over €30 billion to subsidise wind power over time, much of which will likely go to manufacturing companies like Siemens Energy.¹²

Gamesa allegedly decided to open manufacturing plants in Pennsylvania because it was offered US\$15 million in state incentives.¹³ One of its subsidiaries received over US\$25 million in federal tax credits in 2010.¹⁴ The Pennsylvania factory won further US government support for exports in subsequent years. For example, the US Export-Import Bank (EXIM) provided loan guarantees for Gamesa Pennsylvania to export: US\$159 million worth of wind turbines to Honduras for the 102 megawatt Cerro de Hula wind farm in 2010;¹⁵ US\$72.6 million worth of wind turbines to Uruguay in 2013;¹⁶ and US\$61.1 million worth of wind turbines to Costa Rica in 2013.¹⁷ In April 2014, the Bank even held a special ceremony to name Gamesa the Renewable Energy Exporter of the Year at the Bank's Annual Conference in Washington, DC.¹⁸

However, the Lenca people of Rio Blanco, led by the Civic Council of Popular and Indigenous Organizations of Honduras (COPINH), say that **the operators of the Cerro de Hula wind farm simply took over their lands and destroyed their rural 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.¹⁹

Similar concerns have been voiced in Oaxaca, Mexico, where Gamesa was one of the major suppliers of turbines for the dozens of big wind farms in the Isthmus of Tehuantepec, such as the 70-megawatt Bii Nee Stipa II that 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.²⁰ **Activists from Juchitán Popular People's Assembly, who opposed wind power projects, allege being subject to harassment, violence and even murder.**²¹

Siemens Gamesa had several contracts to supply onshore wind farms in Western Sahara, a former Spanish colony that was annexed by Morocco in 1975 and has been under Moroccan occupation ever since. Siemens Gamesa referred to it as 'southern Morocco'. These plants include: Aftissat and Boujdour in Laayoune-Sakia El Hamra, which supply 401.6 MW and 301 MW respectively; Fom El Oued, a 50.5 MW plant in El Aaiún; Midelt, a 180 MW plant; and Tarfaya, a 100 MW plant in Tiskrad.²² The turbines were installed with the help of Nareva, a wind energy company that belongs to Al Mada, the Moroccan monarchy.²³ Western Sahara Resource Watch, an NGO located in Belgium, has organized protests against Siemens Gamesa with the help of exiled Saharawi people, most recently in March 2022.²⁴ Storebrand, a major Norwegian pension fund, divested from the company stock in early 2021, citing the conflict in Western Sahara.²⁵

Further major criticism of Siemens Gamesa comes from Dutch NGO SOMO. SOMO published a report in 2019 that criticised the company (among others) for failing to report how it conducts due diligence in its supply chains for wind turbine materials.²⁶ The organisation noted that **many of the key minerals and metals used to make wind turbines are mined under horrific human rights conditions,**²⁷ **such as cobalt from Glencore's copper mine in the Katanga region of the Democratic Republic of the Congo, which is alleged to use child labour.**²⁸ The report also singled out the use of neodymium, which is used for the permanent magnet in wind turbines.²⁹ 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.³⁰ The discarded waste is then allegedly dumped into a 120 square kilometre pool of toxic mud and waste that is slowly draining into the Yellow River, a major source of water in China.³¹

In January 2023, Siemens received approval from 98.43 percent of the shareholders of Siemens Gamesa to buy back all outstanding shares of Siemens Gamesa and delist the company from the stock exchange.³² In June, Siemens Gamesa minority shareholders approved a capital reduction for the remaining

2.21% of shares not held by Siemens Energy, paving the way for a full integration of both companies.³³ Since the delisting was not expected to have any effect on Siemens Gamesa's manufacturing, Siemens Energy continues to be able to profit from the new subsidies offered by the U.S. Inflation Reduction Act for wind power.³⁴

CORE CONTROVERSIES

- **Siemens Gamesa was the second largest manufacturer of wind turbines in the world.**
- **According to climate activists, the company was set up to greenwash Siemens, which is a major manufacturer of equipment for fossil fuel plants around the world.**
- **Gamesa received huge subsidies from the Danish government to develop its technology.**
- **The company opened plants in America in order to receive tens of millions of dollars in state incentives and federal tax credits.**
- **It supplied wind turbines to wind farms that have been implicated in allegations of land grabs and Indigenous rights violations in Honduras, Mexico and Western Sahara.**
- **Gamesa has been criticised for failing to report how it conducted due diligence in its supply chains. Human rights violations and environmental devastation figured among the alleged impacts of mining the metals and minerals used to manufacture its wind turbines.**

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PROFILE 13

SOUTHERN COMPANY

HEADQUARTERS Atlanta (Georgia), United States

- MAIN SHAREHOLDERS**¹
- The Vanguard Group, Inc. — 8.59%
 - Massachusetts Financial Services Co. — 2.05%
 - T. Rowe Price Associates, Inc. (Investment Management) — 1.55%
 - Franklin Advisers, Inc. — 1.37%
 - Geode Capital Management LLC — 1.36%
 - Fidelity Management & Research Co. LLC — 1.34%
 - Strategic Advisers LLC — 1.04%
 - Capital Research & Management Co. (World Investors) — 1.00%
 - Capital Research & Management Co. (Global Investors) — 0.84%
 - Wellington Management Co. LLP — 0.62%

- PROFITS**
- US\$3.52 billion in 2022
 - US\$19.29 billion between 2016 and 2022

TOP SALARIES AND BONUSES US\$24 million for CEO Thomas A. Fanning (2022)²

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$2.91 billion in dividend payouts in 2022; US\$17.77 billion between 2016 and 2022
 - US\$1.81 billion in share buybacks in 2022; US\$8.44 billion in share buybacks between 2016 and 2022

RENEWABLE GENERATION 6.44 GW capacity in operation as of 2022³

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (US\$ BILLION)	3.52	2.39	3.12	4.74	2.23	0.84	2.45
DIVIDENDS (US\$ BILLION)	2.91	2.78	2.69	2.57	2.43	2.30	0.32
SHARE BUYBACKS (US\$ BILLION)	1.81	0.07	0.07	0.84	1.09	0.79	3.76

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/> yearly-average-currency-exchange-rates

Southern Company sells electricity to 9 million customers in Alabama, Georgia, Illinois, Mississippi, Tennessee and Virginia, making it the second largest provider in the US.⁴ The firm enjoys a monopoly to serve residential customers in many of these states.⁵ Southern Company was founded in Atlanta, Georgia, in 1947, although its constituent companies are older — they include Georgia Electric Light Company of Atlanta, which was incorporated in 1883; Alabama Power, incorporated in 1906; and Mississippi Power, incorporated in 1925.⁶ Southern also owned Gulf Power in Florida for almost 100 years but sold it in 2018 to

NextEra Energy for US\$6.5 billion, after reporting big losses on carbon capture and nuclear power, as well as a downturn in energy spending by customers.⁷

As of 2022, Southern Company has a generation capacity of 43,000 megawatts,⁸ and is the third-largest greenhouse gas polluter in the country.⁹ This is primarily because of its fleet of coal and gas plants such as the Barry Steam Plant and the Miller Steam Plant in Alabama as well as the Bowen Steam Plant and the Scherer Power Plant in Georgia.¹⁰ The company operates approximately 2.4 gigawatts of solar projects in US states including California, Georgia, Nevada and Texas,¹¹ and approximately 2.5 gigawatts of wind power, concentrated mostly in Oklahoma and Texas.¹²

The showcase of Southern Company's commitment to green energy was the Kemper plant in Mississippi. Southern proclaimed the plant would produce 582 megawatts of 'clean coal' power using carbon capture technology.¹³ The company saw the plant as a way to win US\$270 million in federal subsidies and to support the local lignite coal mining industry.¹⁴ They were allegedly supported by Haley Barbour, Southern's chief lobbyist, before he became the governor of Mississippi. Yet the project quickly ran into problems when the carbon capture technology simply did not work at the scale envisaged.¹⁵

Originally projected to cost US\$1.8 billion, the Kemper plant broke ground in 2010 and soon became a central plank of the Obama administration's Climate Action Plan.¹⁶ The project went at least US\$3 billion over budget and was never completed.¹⁷ Unfortunately for customers, Barbour also signed a 2008 law that allowed any excess costs to be charged to them.¹⁸ 'It was exciting times, but it turned out to be like a mirage', Brett Wingo, a former company engineer who blew the whistle on the project, told the Guardian newspaper. 'It was a cool trick — on all of us.'¹⁹ In 2017, Southern Company decided to turn Kemper into a gas plant. Finally, in 2021, the company decided that it was cheaper to blow up some of the carbon capture equipment than to dismantle it.²⁰

Southern Company has also been a major secret funder of climate disinformation since the 1990s, according to a report from the Energy and Policy Institute.²¹ Over the years, the company spent at least US\$62 million funding climate change deniers, almost twice as much as the US\$33 million that Exxon spent in the same time period.²² In fact, the actual figures are likely higher, since this data was only required to be reported until 2005.

Southern paid more than US\$20 million to the Edison Electric Institute alone, a trade group that in 1991 helped create one of the first ever media campaigns designed to 'directly attack the proponents of global warming'.²³ For example, in a 1991 print advertisement, Southern Company published a picture of a cartoon chicken and the caption: 'Who told you the earth was warming?'²⁴ Notably, Southern Company was a major funder of Willie Soon, a climate sceptic employed by the Harvard-Smithsonian Center for Astrophysics, paying him US\$410,000 for his work.²⁵ Indeed, as recently as 2017, Southern's CEO claimed that climate change was not real.²⁶

Southern Company also has a history of fighting solar power. **In 2013, the company levied a US\$5 per kilowatt hour monthly fee on any customer who generated solar power in Alabama, effectively killing off the industry in the state.**²⁷ The company tried to impose similar fees in Georgia but voters rejected the measure.²⁸ Today Georgia has ten times more residential solar installations than Alabama.²⁹

Southern Company leans heavily on two public relations and lobbying firms in Alabama — Matrix Group and Perkins Communications. Matrix and Perkins were paid approximately US\$2.5 million by Southern Company subsidiary Alabama Power over an 18-month period in 2018 and 2019, according to leaked contracts.³⁰ **These firms have set up fake ‘astroturf’ citizen groups like the JobKeeper Alliance and the Partnership for Affordable Clean Energy to support the company’s policies.**³¹ (These initiatives have also played an active role in campaigning against rooftop solar power in Florida for NextEra, which recently bought Gulf Power from Southern.)³²

Violation Tracker, a project of national policy resource centre Good Jobs First, estimates that **the company has accumulated over US\$236 million in fines since 2000**³³ — the biggest of which was a US\$200 million fine for the Miller Steam Plant in 2006, where the company was fined for failing to reduce sulphur dioxide and nitrogen oxides emissions.³⁴ Subsidy Tracker, another project of Good Jobs First, estimates that Southern has received US\$5.6 billion in federal loans, loan guarantees and bailout assistance — and over US\$3.2 billion in 113 subsidies since 2009.³⁵ The vast majority are from the federal government, several of which were paid out for the Kemper coal project. The company was also awarded a US\$295 million grant to retrofit the Barry Steam Plant in Alabama for carbon capture in 2009. Less than four months later, Southern abandoned the project.³⁶

Southern Company might well be able to reap many more billions over the next decade because of the 2022 Inflation Reduction Act, which includes billions of dollars in new money for carbon capture projects as well as for solar and wind projects.³⁷

CORE CONTROVERSIES

- **Southern is the second largest electricity provider and third largest greenhouse gas polluter in the US.**
- **Southern won US\$270 million in public subsidies to develop carbon capture technology, which it eventually blew up rather than reusing when the project failed.**
- **By 2005, Southern had spent at least US\$62 million funding climate change deniers and disinformation, a figure which could be even higher today.**
- **As recently as 2017, Southern's CEO claimed that climate change was not real.**
- **Southern has fought legislation to support solar power generation in homes.**
- **Southern has contracted public relations and lobbying firms to establish fake citizen groups to lobby for company policies and fight environmental and energy policies that will reduce their profits (such as home solar).**
- **Southern has accumulated hundreds of millions of US dollars in fines for environmental pollution.**

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PROFILE 14

TESLA

HEADQUARTERS Austin (Texas), United States

MAIN SHAREHOLDERS¹

- Elon Musk — 12.95%
- The Vanguard Group, Inc. — 6.16%
- Geode Capital Management LLC — 1.12%
- Capital Research & Management Co. (Global Investors) — 0.79%
- Baillie Gifford & Co. — 0.73%
- Capital Research & Management Co. (World Investors) — 0.57%
- Jennison Associates LLC — 0.36%
- T. Rowe Price Associates, Inc. (Investment Management) — 0.35%
- Fidelity Management & Research Co. LLC — 0.35%
- J.P. Morgan Investment Management, Inc. — 0.27%

PROFITS

- US\$12.58 billion in 2022
- US\$14.35 billion between 2016 and 2022

TOP SALARIES AND BONUSES CEO Elon Musk receives no salary or bonuses but currently owns 412 million shares of Tesla stock outright.²

DIVIDEND PAY-OUTS AND SHARE BUYBACKS

- US\$0.00 in dividend payouts in 2022; US\$0.00 between 2016 and 2022
- US\$0.00 in share buybacks in 2022; US\$0.00 in share buybacks between 2016 and 2022

RENEWABLE GENERATION N/A

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (US\$ BILLION)	12.58	5.52	0.72	-0.86	-0.98	-1.96	-0.68
DIVIDENDS (US\$)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tesla was founded in 2003 by two engineers, Martin Eberhard and Marc Tarpening, in San Carlos, California.³ While Elon Musk won a lawsuit to have himself named as a founder of the firm, in fact he was just one of the earliest investors.⁴ The first Tesla car was a rebuilt Lotus Elise from the UK.⁵ Over the last 20 years, Tesla has become the largest manufacturer of electric cars in the world, producing almost 1 million cars in 2021 — although BYD, Geely, and SAIC in China are expected to overtake it eventually.⁶

Most of Tesla's revenue is derived from selling cars. In 2020, Tesla reported US\$810 million in revenue (less than 7 per cent of total revenue) from its energy generation and storage business. This business consists of Megapack, a power storage unit for utilities; Powerwall, a power storage device for homes and businesses; and solar panels.⁷ Tesla manufactures cars and batteries in Canada, China, Germany, and the US (the firm previously had a factory in the Netherlands which has now been shut down).⁸ To date, it has installed Megapack systems in Australia, Japan and the US.⁹

The company has become synonymous with the so-called 'clean energy revolution'. It is also synonymous with CEO Elon Musk. Musk is the world's richest man, even though he does not draw a salary – mostly because he is compensated with company shares worth billions. A multi-year deal signed by the company board in 2018 provided Musk with a pay packet of US\$56 billion. This has been challenged in court by one of Tesla's shareholders.¹⁰ By way of comparison, the average salary of the top 500 CEOs on the Standard & Poor's index is US\$18.3 million in 2021.¹¹

Something rarely talked about is the fact that **Musk built his flagship car and battery company with government subsidies that run into several billion dollars.** Indeed, Subsidy Tracker lists over US\$2.5 billion in subsidies to Tesla.¹² **In 2010, Tesla received a federal loan of US\$465.5 million (since paid back) which was twice as much as the company raised from investors,** giving the company a major break when it first started expanding.¹³ New York state gave SolarCity, a Tesla subsidiary, US\$350 million towards a factory and an estimated US\$400 towards equipment, to convince the company to move to Buffalo in 2014.¹⁴ Nevada gave Tesla a US\$1.3 billion tax break to set up a car factory.¹⁵ Moving forward, there is uncertainty about which cars will be eligible.¹⁶ SpaceX, another Elon Musk company, has received US\$5.4 billion in NASA contracts.¹⁷

Additionally, it is worth examining the purportedly positive environmental impact of a Tesla vehicle. An electric car is only as green as the power source that it uses. Although some Teslas are charged with solar and wind power, the vast majority draw power from the local grid, which is often dependent on conventional power. Teslas that are charged from coal power are simply coal-fueled cars. But whether Teslas are charged with electricity generated by fossil-fuel-based power plants, dams which have displaced millions or nuclear plants that have poisoned the Earth — **until the entire power grid is green (and production does not violate human rights), electric cars are not a catch-all solution to decarbonising transport. Private battery-based vehicles put a greater strain on Earth's natural resources than public transport solutions.**

One of the most unsustainable components of a Tesla vehicle (and all electric cars and power storage systems) is the battery. **EV batteries use cobalt, lithium and nickel, the mining of which has grave environmental impacts pertaining to land, water and air quality and is often associated with horrific human rights abuses.**¹⁹ Tesla buys cobalt from Glencore's copper

mine in the Katanga region of the Democratic Republic of the Congo, which is alleged to use child labour, as well as from three sites in China (Tesla has been sued together with Apple, Dell, Google and Microsoft over this matter).²⁰ It buys lithium from mines in Argentina, Australia and China and nickel from Australia, Canada, China, Indonesia and the US.²¹

To divert attention from this matter, Tesla boasts that the company recycles 100 per cent of old batteries. What they do not disclose is what proportion of the batteries are recycled. 'When Tesla says that they're recycling 100% of their batteries, it means that they are sending the batteries off to someone who's recycling them, recovering the material, and then who knows where that material is going', Kyle Wiens, the CEO of iFixit, told Vice.²² Tesla has since increased its internal battery recycling capacity, but due to the ten-year lifespan of the batteries they are yet to properly test their recycling capacities.²³

The company's car factories have some 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 2014–2018.²⁴ Indeed **Tesla's factories reported 10 times more safety violations than Nissan, the next worst manufacturer, despite the fact that Nissan built almost 10 times as many cars over the same time period.**²⁵ The full extent of the problem may be even worse, according to an internal memo from California's Division of Occupational Safety and Health, which reported that Tesla had failed to include hundreds of injuries in annual summary data that it sends to the government and has failed to properly record other injuries in its logs since 2015.²⁶

Tesla has also been associated with poor working conditions for its employees. In February 2023, workers at the Tesla factory in Buffalo, New York, alleged that at least 18 workers have been fired due to their participation in union organising.²⁷ 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.²⁸ This is not the first time Tesla has been accused of union busting and unfair dismissal. In March 2023 a court ruled in favour of an employee that was illegally fired after being involved in union organising in 2017.²⁹

Tesla's factories also have a questionable record on air pollution. For example, the company does not disclose exact numbers on greenhouse gas emissions but uses graphs instead, unlike Ford and General Motors who publish specific data.³⁰ **In 2018, the company was fined US\$139,500 by the Bay Area Quality Management District over the high levels of nitrogen oxide emitted by malfunctioning burners at its Fremont plant between 2013 and 2016.**³¹ Further, Tesla was fined US\$275,000 by the US Environmental Protection Agency for failing to clean the air filtration system at the new vehicle paint shop at the Fremont factory for three years, resulting in at least one chemical fire.³² Then there is the question of water consumption by Tesla factories. For example, the

company would use 30 per cent of the total water volume in Brandenburg, Germany, where the company is building cars and batteries if planned expansion goes ahead.³³ In 2023 this was still being opposed.³⁴

Tesla is poised to benefit hugely from the 2022 US Inflation Reduction Act because of the major subsidies that are available for both battery and electric vehicle production. The company has already announced that it plans to capitalise on these subsidies.³⁵

CORE CONTROVERSIES

- **Tesla is currently the largest manufacturer of electric cars in the world.**
- **Tesla was kickstarted and is maintained by US government and federal subsidies that likely exceed US\$10 billion.**
- **A multi-year deal with the company board provided CEO Musk with US\$56 billion, while in 2021 alone Musk was paid US\$23.5 billion in shares.**
- **Tesla is ready to benefit from new public subsidies under the 2022 US Inflation Reduction Act.**
- **The company buys cobalt for its car and power storage system batteries from the Glencore copper mine in the Democratic Republic of the Congo, which has been accused of using child labour.**
- **Tesla's car factories have the worst health and safety record of any such facility in the US.**

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PROFILE 15

VATTENFALL

HEADQUARTERS Solna, Sweden

SHAREHOLDER Swedish government (100%)

- PROFITS**¹
- US\$0.00 billion in 2022
 - US\$10.18 billion between 2016 and 2022
 - Profits are paid directly to the Swedish treasury²

TOP SALARIES AND BONUSES US\$2.2 million for CEO Anna Borg (2022)³

- DIVIDEND PAY-OUTS AND SHARE BUYBACKS**
- US\$2.51 billion in dividend payouts in 2022; US\$4.65 billion between 2016 and 2022
 - US\$0.00 in share buybacks in 2022; US\$0.00 in share buybacks between 2016 and 2022 (state-owned firm so no share buybacks)

RENEWABLE GENERATION 4.40 GW of installed wind capacity as of 2022⁴

	2022	2021	2020	2019	2018	2017	2016
NET PROFIT (SWE. KR. BILLION)	0.02	48.01	7.72	14.86	12.01	9.48	-2.17
NET PROFIT (US\$ BILLION)	0.00	5.57	0.83	1.58	1.38	1.06	-0.24
DIVIDENDS (SWE. KR. BILLION)	25.36	5.19	5.30	3.71	3.30	0.87	0.87
DIVIDENDS (US\$ BILLION)	2.51	0.60	0.57	0.39	0.38	0.10	0.10
SHARE BUYBACKS (SWE. KR. BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE BUYBACKS (US\$ BILLION)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Exchange rate based on IRS annual values: <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

Vattenfall — the Swedish word for waterfall — was created by the Swedish government in 1909 to build hydropower in Sweden.⁵ By the latter part of the twentieth century, Vattenfall started to expand, mostly in Europe but also as far away as Laos.⁶ It also became heavily involved in nuclear power generation in Sweden.⁷ By 2009, it had become a major force in Germany and the Netherlands,⁸ with some operations in Denmark and the UK, by taking advantage of the privatisation of the electricity sector in those countries in the 1990s⁹ and 2000s.¹⁰

Today, most of its power is still hydropower and nuclear,¹¹ but it has started to invest heavily in wind and solar,¹² as well as controversial biomass energy,¹³ and 'district heating' mainly from combined heat and power plants.¹⁴ Some of its big wind projects include Blakliden Fäbodberget in northern Sweden, turbines off the coast of Norfolk in the UK, Hollandse Kust West Sites VI and VII in the Dutch North Sea, and Kriegers Flak in the south Baltic Sea.¹⁵

The impacts of its projects have long been scrutinised. According to Vattenfall, public consent was reached across Sweden around the Suorva dam in Stora Sjöfallet national park, the Älvkarleby, Porjus and Trollhättan power plants and the destruction of the Nämforsen falls in the river Ångermanälven in the 1940s.¹⁶ Outside Europe, the story is a little different. Vattenfall has been criticised for its role in the design of the Theun Hinboun hydropower dam in Laos, which allegedly displaced thousands of people in the 1990s — the company held a 10 per cent ownership stake in the dam.¹⁷ **Vattenfall was criticised by Danwatch in 2010 over the massive social and environmental impacts of the Cerrejón coal mine in Colombia, from which it imports millions of tonnes of coal.** Danwatch argued that the mine and associated port and railroad were constructed by landgrabbing and the forcible removal of the indigenous Wayüu community of Tamaquito, as well as the Afro-Colombian inhabitants of Tabaco in the province of Guajira — all beginning in the 1980s, with little or no compensation.¹⁸ Asked to comment, a Vattenfall representative pointed to a Human Rights Impact Assessment the company conducted and its follow up actions.¹⁹

In recent years, Vattenfall has become a prominent supporter of ending fossil fuel production, setting a goal of reaching net-zero by 2040. 'This is not our sustainability strategy', Anna Borg, Vattenfall's CEO, told business leaders and politicians in April 2021, 'It's our business strategy. And it is sustainable.'²⁰

However, **Vattenfall appears to often simply sell off coal assets to other companies rather than shutting them down.** For example, Vattenfall slashed its carbon emissions by 70 per cent overnight in 2016²¹ by selling off the Boxberg, Jänschwalde, Lippendorf and Schwarze Pumpe power plants as well as the Jänschwalde, Nochten, Reichwalde and Welzow-Süd lignite coal mines in eastern Germany to Energetický a Průmyslový Holding (EPH),²² a private company controlled by Czech billionaire Daniel Křetínský.²³ The plants are still running at almost full capacity, producing 235 million tonnes of CO₂ a year compared with an average of 263 million tonnes of CO₂ in the years before the sale.²³ The German government has agreed to pay EPH US\$1.98 billion to shut down the facilities by 2038.²⁵

Moreover, Vattenfall continues to burn coal in Berlin,²⁶ fossil gas,²⁷ and biomass wood chips pellets at 17 plants such as its Moabit plant in Berlin, Diemen in the Netherlands, and in various locations in Sweden. In addition, it is planning to expand these plants (for example by building a new 120 megawatt plant in Diemen),²⁸ using the argument that biomass energy is green, even though it involves intensive CO₂ emissions, just not from fossil fuels.²⁹

The company is also a leader in using Investor State Dispute Settlement (ISDS) mechanisms to fight environmental regulation and protect profits. For example, **Vattenfall pursued the government of Germany in 2009 to pay compensation of €1.4 billion, ostensibly to establish whether the company had been treated ‘fairly and equitably’, following the introduction of environmental requirements to protect the Elbe river from the 1.6 gigawatt Moorburg coal-fired power station in Hamburg.**^{30,31} The plant was expected to use nearly 10 per cent of the carbon budget of German industry over its projected 40-year lifetime, despite producing just 2 per cent of total German electricity.³² The case was brought before the World Bank's International Centre for Settlement of Investment Disputes (ICSID), but the German government agreed to settle the case in 2010 by removing the environmental safeguards and allowing the plant to proceed.³³ The plant began operations in February 2014 but ironically, in July 2021, Vattenfall shut down the plant after it became too expensive to maintain under European emissions trading rules.³⁴

In May 2012, Vattenfall brought another ISDS case against Germany at the ICSID for €3.7 billion in compensation.³⁵ 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.³⁶ Feedback from Vattenfall noted that this ISDS claim was raised to seek clarification on whether they - a private, profit-making company — were treated. 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 2021.³⁷ Brokdorf — the last of the three to be shut down — was closed on schedule, on 31 December 2021.³⁸

Vattenfall Netherlands and its subsidiaries have been criticised criticised when they were awarded €536.3 million in public subsidies in the Netherlands between 2015 and 2020. They have been promised another €915 million for future projects. These subsidies came despite the fact that the firm's share of renewable energy production in the country almost halved from 12.4 per cent to 6.4 per cent between 2015 and 2019. Meanwhile Vattenfall Netherlands declared a total profit of €387 million over the same period and paid out no less than €1.183 billion in dividends.³⁹ In effect, the Dutch government subsidies were simply paid to the Swedish government in dividends.

In 2020, Vattenfall was criticised for demanding rebates from energy suppliers in Sweden after power prices on the open market fell unexpectedly. Public outrage caused Vattenfall to backtrack and apologise. The demand came just after the company declared a 7.7 billion kr profit (US\$847 million) and 5.298 billion kr (US\$583 million) in dividends for shareholders.⁴⁰

CORE CONTROVERSIES

- **Vattenfall is owned by the Swedish state and has taken advantage of energy privatisation beyond its borders by establishing large-scale energy projects in multiple European countries.**
- **Vattenfall has been criticised for the environmental impacts, land grabbing and human rights violations caused by energy projects it is associated with.**
- **Vattenfall has sold off many of its coal assets to third parties rather than closing down operations.**
- **Between 2015 and 2020, Vattenfall Netherlands raked in €536.3 million in Dutch government subsidies, made €387 million in profits and paid out €1.183 billion in dividends, while almost halving its renewable energy production.**
- **Vattenfall plans to expand its 14 plants that burn coal and wood pellets, despite their high CO₂ emissions.**
- **Vattenfall is a prominent user of the ISDS mechanism, suing the German government for billions of euros over new environmental protection regulations and the state shut-down of nuclear power plants.**

This report was shared with Vattenfall before publication. 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.

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