TIED DOWN

Why Europe’s energy giants want to keep us hooked on imported fossil fuel

GREENPEACE
The current Ukraine crisis highlights Europe’s dependence on fossil fuel imports, in particular on gas from Russia. This reliance ties Europe’s hands. It mutes Europe’s diplomatic response to the crisis and the financial cost is crippling. Every year, the EU spends more than €400 billion buying more than half of its energy (53 per cent) from abroad.

This report found that one third of the revenue of the EU’s eight biggest power companies comes from gas and coal imported from countries outside the European Economic Area (EEA). These companies’ business therefore relies heavily on maintaining Europe’s dependency on inherently unstable ‘rentier’ states, exposing Europe to geopolitical threats.

The three utilities making the most revenues from these gas and coal imports are German company E.ON, French company GDF Suez and Italian company ENEL. Spanish company Gas Natural Fenosa, together with ENEL, relies for more than 60 per cent of its revenue on imports.

The report builds on a previous Greenpeace report which detailed how the business models of Europe’s largest energy companies are unsustainable. Europe’s biggest power companies are putting pressure on EU politicians to weaken future commitments to cut carbon emissions and boost renewables and energy efficiency. Ambitious, binding targets in these three areas would help Europe tackle the global threat of climate change, while slashing its dependence on imported fuels.

Failing Business Models

While smaller energy companies, local authorities and private citizens quickly recognised the promise of the renewables and efficiency market in Europe, big companies failed to sufficiently diversify their energy portfolios and as a result overly invested in fossil fuels. Peter Terium, CEO of German energy utility RWE admitted the near defeat of their business models at a press conference in October 2013: “Economic stagnation, energy efficiency improvements and renewable energy are making conventional capacities increasingly unprofitable”.

In a desperate move, many of these market competitors joined forces to increase their lobby clout and convince European leaders to keep their faith in their weak businesses models in the face of alternative energy sources.

1 The European Economic Area (EEA) unites the 28 EU countries and Norway, Lichtenstein and Iceland into an Internal Market governed by the same basic rules.
of energy security challenges. As the so-called Magritte Group – a self-named collection of some of the EU’s largest energy companies – they have enjoyed remarkable access to European Commissioners, MEPs and heads of government, which they used to lobby against progressive energy policies.

**NEXT STEPS**

At their 23-24 October 2014 summit, Europe’s leaders are due to agree energy and climate targets for 2030, and set the policy direction for decades to come. With the threat of Russian gas cuts looming, they will also consider measures to strengthen European energy security.

Greenpeace is calling on Europe’s politicians to implement targets for 2030 that include a 45 per cent share of renewables, 40 per cent energy savings (compared to 2005) and a 55 per cent cut in domestic carbon emissions (compared to 1990). This would massively reduce the need for gas and oil imports while coal imports would cease altogether before the end of the next decade. Those targets would safeguard Europe’s energy future.

The choice is clear: the only secure energy is clean energy. Greenpeace’s recent report Roadmap for Europe shows how this can be achieved.

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**NOTE ON DATA**

Many of the details of European utilities’ operations, particularly fuel sources, are confidential. For this study, Greenpeace Spain has relied on companies’ own reports, research by consultancy company Enerdata and own analysis. The analysis has been carried out for the year 2011, because this is the latest year for which a consistent dataset of official energy statistics, Enerdata research and company data could be obtained. For companies’ coal and gas purchase portfolios, the latest information published by the utilities, if any, was used regardless of the year. Greenpeace has made every effort to present the best possible estimates, but given the companies’ lack of transparency, inaccuracies are always possible.

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As the conflict with Russia deepened, EU leaders asked the Commission in March 2014 to develop “a comprehensive plan for the reduction of EU energy dependence”. Meanwhile, the Commission’s own research shows that EU countries can significantly reduce energy imports from Russia and other sources if they take steps to save energy and shift to greater shares of renewables. This can also reduce the environmental harm done by Europe’s energy system – reducing greenhouse gas (GHG) emissions, air and water pollution.

Europe has already chosen that path. Thanks to target-led policies, the European Union’s energy demand will decline by almost 20 per cent and renewables provide more than 20 per cent of its energy by 2020. In October 2014, European leaders will decide which targets to set for 2030 to foster Europe’s energy transition away from dirty, expensive imports to clean and secure home-grown energy.

Under a European Commission proposal of July 2014 for a 40 per cent greenhouse gas reduction compared to 1990, a 27 per cent share of renewable energy and a 30 per cent reduction of energy consumption by 2030, Europe can cut its energy imports by 18 per cent (and gas imports by 22 per cent). More ambitious targets can reduce overall imports even more, according to the Commission’s studies.

Many businesses and NGOs are in favour of continuing the triple target approach. They are joined by the European Parliament and at least seven governments. Germany, Denmark, Belgium, Greece, Ireland, Portugal and Luxembourg are all calling for three ambitious targets. Even though the dependency on dirty fuel imports is a major economic and environmental burden for

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Europeans, companies who mostly rely on fossil fuel and nuclear power generation, as well as gas sales, don’t want to change. Europe’s biggest power companies, including EDF, E.ON, GDF Suez, RWE, ENEL, Vattenfall, Iberdrola and Gas Natural Fenosa, have all been trying to derail a new set of climate and energy targets. They say that Europe’s climate and energy policy is deeply flawed and argue for a single greenhouse gas reduction target for 2030, and no further targets for renewable energy and energy savings. As demand flattens and renewable power generation increases, these companies are seeing their earnings, credit ratings and profits fall and their shares underperform. As an earlier Greenpeace report shows, the large utilities have added to their own woes by failing to adapt to policy changes such as deregulation, nuclear phase-outs, transitioning to renewable energy and stricter regulation of air pollution and carbon emissions. Chart 1 shows the biggest companies’ recent sales of power and gas in Europe. Jointly, Europe’s eight biggest power companies control about half of Europe’s electricity market, and one third of the

Chart 1 | Gas and power sales of Europe’s largest utilities

<table>
<thead>
<tr>
<th>Utility</th>
<th>Gas</th>
<th>Power</th>
</tr>
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<tbody>
<tr>
<td>E.ON</td>
<td></td>
<td></td>
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<tr>
<td>GDF Suez</td>
<td></td>
<td></td>
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<tr>
<td>ENEL</td>
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<tr>
<td>EdF</td>
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<td>RWE</td>
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<td>GAS NATURAL</td>
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<td>IBERDROLA</td>
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<tr>
<td>VATTENFALL</td>
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</tbody>
</table>

SOURCE | ENERDATA AND EUROSTAT.

8 This report has used the most recent data available from the Enerdata Energy Utilities Watch database. For EDF this is from 2012 and for all other utilities from 2011.
gas market. However, only 13 per cent of their electricity comes from renewable energy sources compared to 33 per cent for the rest of Europe’s power generation (2012).

In 2011, the companies generated an estimated €342 billion in revenue from European sales of gas and power, of which an estimated 59 billion is profit before tax (EBITDA, Earnings before Interests, Taxes, Depreciation and Amortisation). About one third of this, or €116 billion in revenue, was generated on the basis of gas and coal imported from outside of the European Economic Area (EEA).

The three utilities who make their most revenue from imported gas and coal are E.ON, GDF Suez, and ENEL. The numbers are staggering and explain their desire for status quo. E.ON is estimated to have made an incredible €36 billion in revenue from these imports in 2011; GDF Suez made an estimated €23 billion; and ENEL €18 billion.

Of E.ON’s overall revenue from electricity and gas sales, we estimate that 36 per cent was related to imports in 2011. For GDF Suez and ENEL, 37 and 67 per cent of their respective revenue came from imports. The revenue of Gas Natural Fenosa was almost totally dependent on imports: approximately 85 per cent of its revenue from electricity and gas sales came from imports of coal and gas in 2011 (Chart 2).

**Chart 2 | Revenue from gas and power and estimated share from extra-EEA coal and gas imports**

<table>
<thead>
<tr>
<th>TOTAL REVENUE</th>
<th>ESTIMATED REVENUE FROM IMPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BILLION EUROS</td>
<td></td>
</tr>
<tr>
<td>E.ON</td>
<td>GDF SUEZ</td>
</tr>
<tr>
<td>ENEL</td>
<td>EdF</td>
</tr>
<tr>
<td>RWE</td>
<td>GAS NATURAL</td>
</tr>
<tr>
<td>IBERDROLA</td>
<td>VATTENFALL</td>
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</tbody>
</table>

*Source: ENERDATA and EUROSTAT*
Chart 3 shows the big utilities’ overall gas and coal consumption and share of imports from outside the EU and Norway. Looking at gas sourcing, ENEL, Gas Natural Fenosa, EDF and Iberdrola all source over 75 per cent of their consumption from outside the EU and Norway. This is considerably more than the EU’s average dependency on extra-EEA imports of around 45 per cent.\(^9\)

Russia is the biggest supplier for E.ON, GDF Suez and RWE while ENEL and Gas Natural Fenosa rely most heavily on Algeria.

On coal imports, the majority of the companies source 50 per cent or more from countries outside the EEA, mostly from Russia, Colombia, U.S., South Africa and Indonesia. Ninety per cent or more of the coal that Gas Natural Fenosa, Iberdrola and ENEL import is from outside the European Economic Area. Again, this is much more than the European Union’s average 63 per cent import dependency.\(^{10}\)


E.ON

E.ON made €2 billion in gross profit (EBITDA, Earnings before Interests, Taxes, Depreciation and Amortisation) from its gas business in 2010, and more than a quarter of its gas came from Russia. The company made a further €1.7 billion on their fossil generation where hard coal and gas represent 90 per cent of generating capacity. Approximately 70 per cent of gas and 80 per cent of hard coal used in Germany is imported from outside of Europe. Along with Germany’s BASF and Gazprom, E.ON is also a partner in Yuzhno Russkoye in Siberia, one of the world’s largest gas fields. The company holds a 15.5 per cent stake in the Nord Stream pipeline that was built to bypass Ukraine.

IBERDROLA

Iberdrola imports 94 per cent of its European coal and sells it in Spain and the UK (as Scottish Power), allowing it to sell 159 TWh of power in 2011. Both countries are reliant on foreign imports for the majority of the coal they consume: the UK is 65 per cent, and Spain 95 per cent dependent on foreign coal.
ENEL

ENEL is estimated to import more than 90 per cent of the gas it supplies, and to source approximately 45 per cent of that from Algeria.¹ (In 2013, long term contracts with Algeria were modified, leading presumably to a significant reduction of imports from that country.) ENEL sells the gas on in Italy, Spain and Portugal, which have the highest gas dependence on Algeria of any country in the EU: 31 per cent, 42 per cent and 49 per cent of their total gas consumption, respectively.

¹ Gas contract figures are from 2007, the most recent year available.
**GAS NATURAL FENOSA**

Gas Natural Fenosa made an incredible 50 per cent profit (EBIT, Earnings Before Interest and Taxes) from its gas sales in Spain, or a total of €6 billion. The company sources its gas from Oman, Egypt and Algeria according to their CSR report, with Algeria being the main supplier. An estimated 85 per cent of gas sold in Spain is imported from outside Europe.

**Chart 7 | Gas Natural Fenosa gas contracts 2011**

**Chart 8 | RWE gas contracts 2012**

**RWE**

RWE makes approximately 4 billion in revenue at a 25 per cent profit margin selling gas in Czech Republic and Slovakia, both of which are almost 100 per cent dependent on Russian gas. Forty one per cent of the company’s power generation in 2013 was based on hard coal and gas. It imported two thirds of its hard coal from outside of Europe, with 28 per cent of imports coming from Russia. Thirty nine per cent of the company’s contracted gas supply is from Russia (Gazprom).
As their business model is coming under pressure, Europe’s big utilities are reaching out to governments for help. Six of these eight companies are part of the so-called Magritte Group of CEOs set up in by Gérard Mestrallet, CEO of GDF Suez, in May 2013.

The Magritte Group is conducting a pan-continental campaign to radically change EU energy policy to suit its own, narrow interests.

**MAGRITTE GROUP**

So-named for its first meeting in the Brussels museum of surrealist artist René Magritte in May 2013, the group is led by GDF Suez, the French utility that sponsors the museum. The initial group had eight members: E.ON and RWE from Germany, Iberdrola and Gas Natural Fenosa from Spain, ENEL and ENI of Italy and Gas-Terra of the Netherlands. The group expanded with the addition of Swedish utility Vattenfall in September 2013, Czech utility ČEZ in October 2013, and Austrian OMV and Finnish Fortum by December 2013, taking it to a peak membership of twelve. Since then the Group appears to have unravelled with the exit of Vattenfall in early 2014, and most recently with the withdrawal of OMV.

For more than a year, the Magritte Group engaged in intense lobbying efforts, conducting meetings with members of the European Commission, European Parliament and heads of national governments to push their agenda.

By October 2013 the CEOs met French President François Hollande. They then met Dutch Prime Minister Mark Rutte (November 2013), German Chancellor Angela Merkel (February 2014) and Czech Prime Minister Bohuslav Sobotka (April 2014). They were part of high level meetings with senior MEPs and Energy Commissioner Oettinger.

France’s EDF never joined the group, although its lobbying of politicians has been largely consistent with that of the Magritte Group.
These companies are asking governments to drop any policies that promote renewable energy and energy savings. In a letter sent on 21 January, one day before the publication of the 2030 proposals, the Magritte Group urged the Commission to “… base the upcoming 2030 strategy on a single binding greenhouse gas reduction target (and no binding target for renewables in 2030 at EU and/or national levels).”

“By giving priority to a carbon signal through such a CO2 target, there will be no need to bring forward targets for particular technologies or means to decarbonise (like RES or Energy Efficiency).” EDF’s position on climate and energy framework for 2030, July 2013

The companies also want governments to cut back financial support for renewable energy like offshore wind and solar power, though it is provided simply to level the playing field with dirty energy. “We are asking to stop or to reduce dramatically the subsidies to renewables and to concentrate the subsidies on research and development,” said Gérard Mestrallet, CEO of GDF Suez at a press conference on 11 October 2013.11 E.ON’s Johannes Teyssen complained: “renewable subsidies are reaching a level that is totally unbearable”, while ENEL CEO Fulvio Conti spoke of the "insanity of subsidies given to renewables".12

“By giving priority to a carbon signal through such a CO2 target, there will be no need to bring forward targets for particular technologies or means to decarbonise (like RES or Energy Efficiency).” EDF’s position on climate and energy framework for 2030, July 2013

The same insanity of having incentives given to renewables is in Spain, is in Germany, is in Italy and the end result of that is that Germans are paying €20bn more of the energy while the companies are shutting down plants. Is that logic? Is that what we want in Europe? This is a recipe for disaster.” Fulvio Conti, CEO of ENEL, 11 October 2013

These sensational and alarmist claims ignore the fact that about €30bn are given to renewables every year in Europe while an estimated €61bn are paid in nuclear and fossil fuel subsidies.13 Experience shows that support for renewable energy has helped to significantly reduce technology costs, bring down wholesale electricity prices and reduce countries’ fuel import bills.14

The big utilities are not against government subsidies, they just want them for themselves. They are demanding new subsidies for their own failing businesses so they can keep gas- and coal-fired plants operational that would otherwise be uneconomic. They pretend that such ‘capacity payments’ for fossil and nuclear plants are needed to secure power supply for European customers. Some CEOs effectively evoked the sceptre of blackouts if such payments are not given.

“The risk of black-out has never been so high so we think something should be done in the short term in terms of capacity payments.” Gérard Mestrallet, CEO of GDF Suez, 11 October 2013

They want to make us believe it is Europe, not their own business, that is at stake:

“If you go for a renewable society without the security of supply then we are going to have a problem. Not we as RWE, not we as sector but we as Europe. Then the system is going to fail. That is what the SOS sign of today is about, it’s about the failure of the system as whole.” Peter Terium, CEO of RWE, 11 October 2013


11 GDF Suez, 10 CEOs push for EU energy policy to change direction, press conference, http://www.youtube.com/watch?v=6uB1Qht1Hdw

12 Ibid.
In a reversal of the facts, their scaremongering goes as far as saying only import-dependent gas and coal plants can secure a stable power supply. RWE's Peter Terium said: “many gas and coal-fired power stations are not profitable anymore, but these are the only sources that can ensure security of supply”.  
During the Ukraine crisis, the same companies have sought to reassure governments that Russian gas supplies are secure, and that Europe’s dependency on Russian imports is not a problem. Gérard Mestrallet, CEO of GDF Suez has repeatedly pointed out that it was not in Russia’s interest to enforce a prolonged shutoff.  

“… I am tired of this eternal prattling on about dependency. One could also describe a marriage as dependency if one were feeling spiteful. But one could also see it as a partnership. Europe and Russia have built up an energy partnership over the course of four decades and over that entire period, there hasn’t been a single day on which natural gas was used as a strategic weapon against the West.” Johannes Teyssen, CEO of E.ON, March 2014

The Magritte Group’s motive is clear: overly invested in fossil fuels, and lacking renewable assets, these big energy dinosaurs want to lock Europe into a continuation of dependence on imported fossil fuels.

15 Energy post (April 2014), The vision of Peter Terium, CEO of RWE: “We want to be the holistic energy manager of the future”, http://bit.ly/1Caxi1r

16 AFP (August 2014), Russian gas cut to Ukraine unlikely to hurt Europe: analysts, http://yhoo.it/1ycU1bl

AMBITIOUS 2030 TARGETS ARE ESSENTIAL

This retrograde crusade has been carefully timed, for Europe is at a critical juncture. Discussions over the 2030 EU climate and energy targets are underway, and will determine the European energy scenario until the middle of the century. Fixing a package that has binding and ambitious targets for renewables and energy efficiency will have far-reaching benefits for energy security, carbon emissions and employment creation in Europe until the middle of the century.

GREENPEACE PROPOSAL

Research carried out for Greenpeace by DLR, the German Institute of Technical Thermodynamics, shows that clean and secure energy are two sides of the same coin. A stringent set of policy targets for 2030 will deliver on both objectives – reducing the risk of energy supply shortages and reducing the risk posed by global climate change.

The report ‘Roadmap for Europe: towards a sustainable and independent energy supply’ shows that, based on the 2030 targets proposed by the Commission in January, even if the European Union exploits all of its own conventional gas, oil and hard coal, it would still have to import a total of 29,000 petajoules (PJ) per year in fossil fuels by 2030. Specifically, it would need to import about 255 billion cubic metres (m³) of gas, 2.8 billion barrels (bbl) of oil and 81 million tonnes of hard coal. Overall, this would result in a limited reduction in EU energy imports compared to today’s levels.

By contrast, if EU leaders backed more ambitious 2030 targets, overall fossil fuel import requirements would be 45 per cent lower than under the Commission proposal. Specifically, annual imports of about 90 billion m³ of gas and 1.3 million bbl of oil could be avoided by 2030, while no imports of hard coal would be needed at all.

Compared to the Commission’s January proposal, this represents an extra 35 per cent cut in gas imports and a 45 per cent cut in oil imports by 2030. The Energy [R]evolution pathway would also result in much higher carbon emission cuts by 2030 compared to the Commission proposal. The investments required in the power sector would be very similar to those under the Commission’s proposal.

Table 1 shows sales, revenue and EBITDA (Earnings before Interests, Taxes, Depreciation and Amortisation) figures for the eight biggest utilities, as well as calculated estimates of the share of gas and coal imported from outside the EEA (European Economic Area), and the revenue generated by those imports.

Table 1 | Overview of major European utilities

<table>
<thead>
<tr>
<th>Company</th>
<th>Sales, TWh</th>
<th>Revenue, MEUR</th>
<th>EBITDA, MEUR</th>
<th>Imports</th>
<th>Generation</th>
<th>Estimated revenues based on imported coal &amp; gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gas</td>
<td>Power</td>
<td>Gas</td>
<td>Power</td>
<td>Gas &amp; Power</td>
<td>Gas</td>
</tr>
<tr>
<td>E.ON</td>
<td>173</td>
<td>567</td>
<td>61,362</td>
<td>39,344</td>
<td>100,706</td>
<td>4,408</td>
</tr>
<tr>
<td>GDF Suez</td>
<td>523</td>
<td>431</td>
<td>n.r.</td>
<td>n.r.</td>
<td>60,158</td>
<td>n.r.</td>
</tr>
<tr>
<td>ENEL</td>
<td>116</td>
<td>210</td>
<td>10,297</td>
<td>16,784</td>
<td>27,081</td>
<td>n.r.</td>
</tr>
<tr>
<td>EdF</td>
<td>157</td>
<td>568.5</td>
<td>n.r.</td>
<td>n.r.</td>
<td>72,729</td>
<td>n.r.</td>
</tr>
<tr>
<td>RWE</td>
<td>322</td>
<td>295</td>
<td>1,766</td>
<td>1,166</td>
<td>40,467</td>
<td>n.r.</td>
</tr>
<tr>
<td>Gas Natural</td>
<td>237</td>
<td>84</td>
<td>1,240</td>
<td>5,452</td>
<td>6,692</td>
<td>896</td>
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<tr>
<td>Iberdrola</td>
<td>78</td>
<td>159</td>
<td>n.r.</td>
<td>n.r.</td>
<td>14,496</td>
<td>n.r.</td>
</tr>
<tr>
<td>Vattenfall</td>
<td>-</td>
<td>209</td>
<td>-</td>
<td>20,073</td>
<td>20,073</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1,606</td>
<td>2,523</td>
<td>342,402</td>
<td>59,050</td>
<td>34%</td>
<td>117</td>
</tr>
</tbody>
</table>

EUR per EU citizen: 681 118 231
CREDITS

Researched by Lauri Myllyvirta. Written by Grace Boyle and Franziska Achterberg, October 2014 Designed by Tatjana Petric

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This paper and the information contained herein is not investment advice. The purpose of this report is to highlight the risks posed by some utilities’ business model because governments and other investors may want to have a better understanding of these risks.