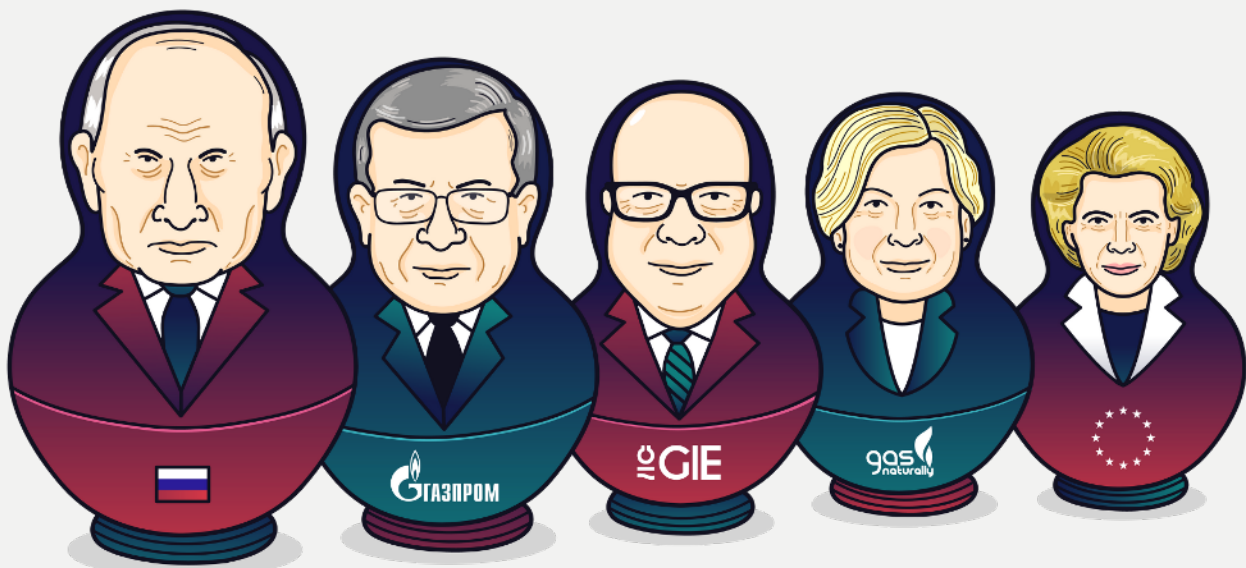


HOW RUSSIAN COMPANIES LOBBIED FOR THE EU TAXONOMY TO INCLUDE FOSSIL GAS & NUCLEAR ENERGY

And why the European Parliament must stop new
rules giving Putin exactly what he wants



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1. INTRODUCTION

The EU's sustainable finance Taxonomy is a set of rules that will govern which activities can be labeled as sustainable. The Taxonomy became law in July 2020, but legislators left the important technical details to be resolved through delegated acts. The Taxonomy's key principle is that activities should substantially contribute to one of six environmental goals¹ – like tackling climate change – *and* Do No Significant Harm in all other areas. Despite this, it has been shown how the gas and nuclear industry pulled out all the stops to get their dirty and dangerous energy sources included, and in February 2022, the European Commission proposed a delegated act that did just that. The Taxonomy should *prevent* greenwashing, but including gas and nuclear turns it into a tool *for* greenwashing, helping to finance new dirty energy projects (see Box A)².

In light of Russia's invasion of Ukraine, Greenpeace France decided to investigate whether Russian companies were part of the lobbying to fatally weaken the Taxonomy. The results are eye-opening. Russian state-owned (or-linked) oil and gas and nuclear companies, such as Gazprom, Lukoil and Rosatom – and the lobby groups that represent them, including Gas Infrastructure Europe and the World Nuclear Association – have been actively lobbying on the file. And the Commission seems determined to give them exactly what they want.

The new delegated act would entrench Europe's dependence on Russian gas and uranium – already over 40% and 20% of its supply, respectively.³ As Russian Energy Minister Nikolai Shulginov put it, the EU Taxonomy's new delegated act does not bring risks “but a range of opportunities”⁴ – like selling more fossil gas (or hydrogen made from it), uranium, reactors and other nuclear services.

The EU has caved in to the gas lobby to an extent that even Russia's own Taxonomy, created in September 2021, does not do.⁵ On the other hand, from the outset, Russia labeled nuclear as green, with Rosatom's boss saying other countries should “follow Russia's example by also formally recognising nuclear as a green energy source.”⁶ This is precisely what the European Commission did: its new delegated act, by including nuclear and gas, could increase Europe's energy dependencies on Russia – giving Putin powerful geopolitical bargaining tools. What's more, there is a worrying correlation between Russia's oil and gas exports to Europe and its military spending, which cannot be ignored in view of Putin's attack on Ukraine.⁷ But there is still hope: the European Parliament – which has already adopted a resolution to put an embargo on imports of Russian gas and uranium⁸ – will get the chance to vote down this toxic and climate-catastrophic act this summer.



**THE EU TAXONOMY
OFFERS RUSSIA
“A RANGE OF
OPPORTUNITIES”**

*Nikolai Shulginov,
Russian Energy Minister*

Box A: What is at stake if the Taxonomy includes nuclear and gas?

The inclusion of fossil gas and nuclear in the Taxonomy could have far reaching impacts on companies' disclosures, the financial products they offer, and even the national debt framework. It would mislead investors and consumers, and divert investments away from renewable energy and energy savings.

Putting nuclear power generation and fossil gas in the Taxonomy is a major door opener for them both, as investors who want to add them to their portfolio will be able to do so while complying with the green label of the Taxonomy. Only 16% of the biggest European asset managers have policies against investing in nuclear power, and only 23% exclude fossil gas, meaning that huge portions of Europe's financial sector will be able to sell consumers misleading products like green pension funds which actually include investments in fossil gas and nuclear energy.⁹ Inclusion in the Taxonomy will also allow fossil gas and nuclear power companies to sell green bonds, a market from which they were previously excluded. There are an estimated €3.3 trillion in ESG assets under management in the EU (ie investment funds that take into account 'Environmental, Social and Governance' criteria); changes to the framework could sway investment decisions for large fund managers and their customers.¹⁰

The Taxonomy will play a crucial role in multiple aspects of the EU's Sustainable Finance Strategy. For example, reporting and disclosure obligations for companies under the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable Finance Disclosure Regulation (SFDR), both of which are currently being negotiated, will refer to the Taxonomy. In addition, the European Commission is working on the reform of the EU economic governance framework, with the Stability and Growth Pact (SGP) at its heart. In order to enable greater investment into the green transition, some stakeholders are suggesting that "green investments" be excluded from counting towards the national debt¹¹ – however, with the Taxonomy providing the definition for what counts as a "green investment", this could give member states *carte blanche* to ramp up their investments into fossil gas and nuclear power.

2. RUSSIAN GAS FIRMS' LOBBYING FOR GAS IN THE TAXONOMY

Russian oil and gas firms have been subtly but significantly embedded in the fossil fuel industry's lobby offensive aimed at getting gas included in the Taxonomy. And there's a reason that dirty energy giants have been fighting so hard: the Taxonomy could facilitate an additional 112 GW of gas power capacity in the EU (assuming maximum utilisation of its proposed new gas rules, leading to the replacement of all existing EU coal power plants with fossil gas).¹² This would be a massive 70% increase in the capacity of gas power in the EU.¹³

Under the rules for maximum use of these plants, the Taxonomy proposal could lead, over a 20 year time-frame, to total additional emissions of 1.4 billion tonnes of CO₂-equivalent gases.¹⁴ This is roughly equal to the total combined greenhouse gas emissions of Germany, France and Spain in 2020.¹⁵ And let's not forget: Russia, as the single biggest exporter of fossil gas to the EU, stands to gain the most from this Taxonomy-driven gas boom (Box B).

Box B: Russia could earn billions from a Taxonomy-driven gas boom

In 2021, Russia exported 155 billion cubic metres of gas to the EU, which corresponds to 45% of EU gas imports and 40% of the EU's total fossil gas consumption.¹⁶ The total value of these imports is estimated to be above €40 billion.¹⁷ In 2022, both gas imports from Russia and gas prices have continued to increase, further pumping up the value to Russia of gas exports to Europe.¹⁸

If, as the new Taxonomy delegated act would allow, all EU coal power plants were replaced by additional gas power plants, this would increase the EU's gas consumption by around 38 billion cubic metres per year.¹⁹ If all of this demand was taken up by increased imports from Russia, this would add over €10 billion per year in payments to Russia.²⁰ More realistically, if we assume that only 40% of this extra gas demand is met by Russian imports – ie matching the pre-Ukraine war level of EU gas consumption that comes from Russia – then this would be an extra €4 billion sent from the EU to Russia per year. It is, of course, hard to know how much Russian gas the EU will use in the future, given renewed efforts to reduce Europe's fossil fuel dependency on Russia. However, at the time of writing, there are still no EU sanctions on imports of Russian gas, even as Russia turns off the gas supply to Poland and Bulgaria.²¹

The repeated past failures of EU countries to wean themselves off Russian energy, following previous occasions that Russia turned off the gas, or after its 2014 annexation of Crimea, point towards the 'lock-in' effect of the huge sunk investments in pipelines and other gas infrastructure from Russia to Europe. Since the start of Russia's war on Ukraine on 24 February 2022, the EU has paid €26.9 billion to Russia for fossil gas, according to the Centre for Research on Energy and Clean Air.²² The high degree of dependency on Russian gas of countries like Germany (whose Finance Minister Christian Lindner said, in April 2022, regarding possible Russian fossil fuel sanctions, that "at the moment it's not possible to cut the gas supplies"²³), mean we cannot assume that new Taxonomy-driven gas demand won't in part be met by Russian supply.

It is also worth noting that, alongside fossil gas imports, Russia is an important provider of gas turbine technology, in particular to countries in Eastern Europe; 75% of Russia's gas turbine exports go to the EU, with a total value of over €2bn in 2019.²⁴ Building the additional 112 GW of gas power plant capacity that the Taxonomy would allow could also be an opportunity for Russia to increase gas turbine exports.



The major beneficiary of the Taxonomy and part of Brussels lobby group Gas Infrastructure Europe:

State-owned Russian gas giant **Gazprom** is set to be a major beneficiary if gas is included in the Taxonomy: Gazprom is the largest supplier of gas to the EU, and it is the sole operator of the pipelines used to export gas from Russia to Europe.²⁵ Gazprom actively lobbies in Brussels, having secured at least ten top-level meetings with Commissioners (or their cabinets) and Director Generals in recent years, and holding a corporate access pass to the European Parliament.²⁶

Gazprom's entry in the EU's lobby register, however, falls short of real transparency, as it fails to declare its lobby group memberships.²⁷ Further digging, however, reveals that Gazprom Energy is listed as a member of French gas and electric lobby **AFIEG**²⁸ and Gazprom Germania as a member of Brussels-based **Gas Infrastructure Europe**.²⁹

Gazprom is the operator of the new Russia-Germany Nord Stream II gas pipeline, and the owner of Germany's largest gas storage facility in Rehden, Lower Saxony.³⁰ Gazprom Germania was a 100% subsidiary of Gazprom, until the German regulator seized control of the company in April 2022.³¹ Until then Gas Infrastructure Europe represented Gazprom's interests (along with other gas providers) in Brussels, including targeting the Taxonomy, according to its lobby register entry.³²

Gas Infrastructure Europe has had 12 top-level meetings with the Commission, including Energy Commissioner Simson as recently as February 2022.³³ It is also a member of two European Commission expert groups and an MEP-industry group known as the **European Energy Forum**, which has been investigated by Corporate Europe Observatory for "flagrantly enabling dirty energy companies to wine, dine, and influence MEPs".³⁴

A July 2021 report by Reclaim Finance – which exposes the gas industry's "lobbying bulldozer" to get gas in the Taxonomy – explains how companies externalize lobbying by hiring consultancies, noting that Gas Infrastructure Europe was a client of Nove.³⁵ Nove's current lobby register entry shows Gas Infrastructure Europe hired the firm in 2021 to work on files including the Taxonomy.³⁶ An archive of the EU's lobby register data, provided by lobbyfacts, shows that several more lobby firms have had Gazprom subsidiaries, or groups it's a member of, as a client in recent years, including Portland and Edelman Public Relations Worldwide.³⁷



Greenpeace Germany activists protest the NordStream1 Baltic Sea pipeline operated by Gazprom, March 2022

RUSSIAN DOLLS:

Gazprom > Gas Infrastructure Europe > Gas naturally

Gas Infrastructure Europe describes itself as a founding member of **Gas Naturally**,³⁸ a lobby supergroup that represents eight associations from across the gas value chain. A letter released under access to documents law reveals that in March 2021, Gas Naturally – which through Gas Infrastructure Europe, has indirectly represented Gazprom – lobbied Commission Vice President Frans Timmermans that “the delegated act should recognise natural gas as an enabling/transitional activity contributing towards climate neutrality” – so that the gas industry can “finance itself in an affordable way” and “be rewarded for investing in the best available solutions.”³⁹

This idea that gas should be funded under the Taxonomy as an ‘enabling’ or ‘transitional’ activity is exactly what the Commission eventually proposed in its February 2022 complementary climate delegated act (after postponing the issue in its first, April 2021, delegated act on climate change mitigation and adaptation). The success of the lobby offensive of the fossil gas sector in fatally weakening the taxonomy is clear,⁴⁰ and it cannot be ignored that some of the most powerful players in this sector – with a lot to gain – include state-owned Russian companies like Gazprom, and the lobby groups that represent them directly and indirectly.

Just scratching the surface?

However, the true breadth and depth of the influence of companies like Gazprom remains opaque, as the more we dig, the more we seem to be only scratching the surface. Take the **Brussels Energy Club (BREC)**, a not-for-profit whose founding members include NIS Gasprom

Neft,⁴¹ a Serbian company majority-owned by Gazprom’s oil subsidiary, Gazprom Neft.⁴² BREC’s events take place under Chatham House Rule and attract officials from the European Commission and Parliament alike, alongside energy companies like Gazprom.⁴³ BREC’s recent events have covered the future of the EU-Russia gas relationship in light of the war in Ukraine, in April 2022,⁴⁴ Russia’s Climate Strategy, in October 2021,⁴⁵ and Gazprom in the European market, in February 2020.⁴⁶ The latter’s event description suggests that new gas pipelines like Nord Stream II mean that “any structural shift of the energy security debates in Europe to an agenda overly dominated by the themes of sustainability and climate is likely premature”.⁴⁷ In other words, it is implied that the climate will continue to play second fiddle to fossil gas from Russia, because gas is locked-in to Europe’s energy supply by multi-billion euro infrastructure. The inclusion of gas in the Taxonomy would facilitate the financing of yet more expensive gas infrastructure, locking-in fossil gas for even longer – and proving BREC right.

Rosneft part of Commission’s industrial hydrogen alliance:

As difficult as it is to uncover the true extent of Gazprom’s influence in Brussels, it is harder still for other Russian state-owned fossil fuel companies. Majority state-owned oil and gas company **Rosneft**, for example, is not currently signed up to the EU’s lobby register, but its German refinery branch Rosneft Deutschland was in 2020-2021, spending up to €400,000 lobbying Brussels.⁴⁸ Rosneft Deutschland listed membership of Fuels Europe, but the petroleum refining industry lobby has since told the press, in March 2022, that it had “broken all ties” with Rosneft.⁴⁹ However, Rosneft Deutschland also declared in its lobby register entry that it was a member of the **European Clean Hydrogen**

Alliance (ECH2A), which still appears to be the case; the list of **ECH2A** members provided on the European Commission’s website as of April 2022 includes Rosneft Deutschland.⁵⁰

ECH2A is one of the Commission’s industrial alliances – condemned as captured by the fossil fuel industry⁵¹ – intended to facilitate the large-scale deployment of “clean hydrogen”.⁵² However, thanks to gas industry lobbying, this includes so-called “low carbon” or blue hydrogen – hydrogen made from fossil gas with (the distant promise of) carbon capture and storage. The gas industry sees fossil-based hydrogen as a lifeline to a business model – and infrastructure like pipelines – that is threatened by climate action. Russia’s hydrogen strategy aims to make Russia a world leader in the production and export of hydrogen, targeting 20% of the global market by 2030 – supplementing NordStream II.⁵³ The fact that Rosneft is part of an EU industrial alliance which gives fossil fuel companies the opportunity to shape the debate and direct public money is deeply concerning. Especially in light of the gas industry’s successful narrative around ‘hydrogen-ready’ infrastructure; as Reclaim Finance note, the Commission’s first delegated act in April 2021 had weak criteria for hydrogen manufacture and the blending of ‘low carbon gases’, potentially enabling the financing of infrastructure that will predominantly transport fossil gas.⁵⁴

Looking further – Lukoil’s levels of influence:

The role of private Russian companies should not be overlooked, either. **Lukoil** – which in spite of all the rhetoric and sanctions, still has

still has four lobbyists with access passes to the European Parliament⁵⁵ – is Russia’s largest non-state-controlled oil firm. However, Lukoil was founded as a state-run company and is still considered to have close ties with the Russian state. The Guardian reported in 2018 that Lukoil “has been used as a vehicle of government influence” and quoted its chief executive, former Soviet oil minister Vagit Alekperov, as saying the company’s strategic aims are closely aligned with those of Russia.⁵⁶ The billionaire oil boss actually resigned from Lukoil in late April 2022, after EU sanctions targeted Alekperov and other Russian oligarchs.⁵⁷

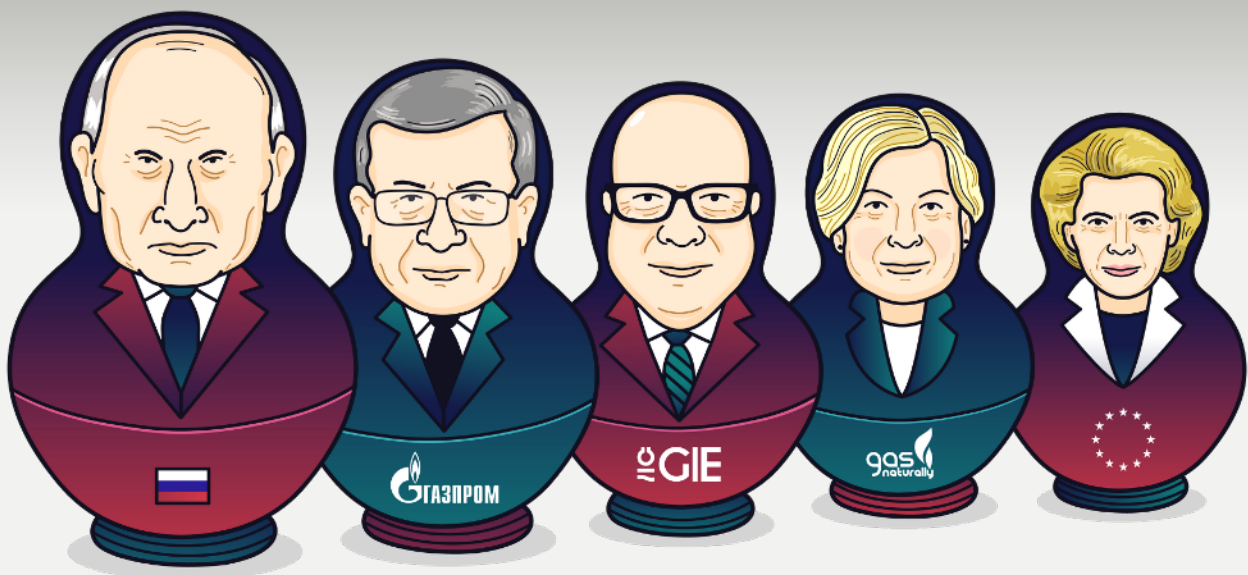
Lobbyfacts reveals that Lukoil has hired several different lobby firms in recent years,⁵⁸ and like Rosneft Deutschland, Lukoil is a member of ECH2A. In its current lobby register entry, Lukoil lists the Taxonomy as one of the main files it lobbies on, and declares that it is a member of two major lobby groups that have been pushing for gas’ inclusion in the Taxonomy – namely, **Fuels Europe** and **Business Europe**.⁵⁹

Fuels Europe told the press in March 2022 that Lukoil’s membership was being maintained, and as of end April 2022, it is still listed as a member of this influential group.⁶⁰ FuelsEurope is a member of eight Commission expert groups, it has nine lobbyists with Parliamentary passes, and has had 38 top level Commission meetings in recent years, including one solely on the subject of the Taxonomy.⁶¹ Reclaim Finance’s investigation into Taxonomy lobbying identified FuelsEurope as the fourth biggest lobby spender, up to €3.5 million.⁶²

In its Spring 2020 feedback to the Commission on the Taxonomy, FuelsEurope argued that “technology neutrality should drive the development of the Taxonomy delegated acts” – in other words, that renewables should not be favoured over ‘low-carbon’ gas or hydrogen – and went so far as to challenge “the concept of ‘lock-in effects’”, which it claimed were “not

wholly consistent” with this neutrality.⁶³ FuelsEurope also pushed for the delegated acts to include “transitional activities” that don’t have a single emissions threshold; rather, the thresholds should not be “set too low too early”. These demands were ultimately successful, opening the door to higher emissions activities and more fossil fuel infrastructure.

Business Europe did have Lukoil listed as a partner company, but in March 2022 the big business group removed Lukoil’s name from its Corporate Advisory and Support Group.⁶⁴ That means, however, that Lukoil had an influential position in BusinessEurope throughout the Taxonomy legislative process. And BusinessEurope’s levels of influence simply cannot be understated: of the 337 top-level Commission meetings BusinessEurope has had in recent years, 11 were solely focused on the Taxonomy (though other meetings on more general topics may too have discussed it).⁶⁵ More to the point, BusinessEurope sits on the Commission’s Platform on Sustainable Finance, which is consulted in the writing of all delegated acts under the Taxonomy regulation.⁶⁶



Russian Dolls, from left to right: Vladimir Putin, Victor Zubkov; President of Gazprom, Torben Brabo President of Gas Infrastructure Europe, Dawn Summers President of GasNaturally, Ursula Von Der Leyen, President of the European Commission

3. EUROPE'S NUCLEAR LOBBY INTERTWINED WITH ROSATOM

Inclusion in taxonomy will entrench EU reliance on Russia

From nuclear energy to weapons, Rosatom is Putin's right hand: Russia's state-owned nuclear energy corporation **Rosatom** was set up by Vladimir Putin in 2007.⁶⁷ Already the world's leading exporter of nuclear power plants,⁶⁸ Russia has a national strategy to increase its nuclear exports,⁶⁹ while its Western competition is dwindling.⁷⁰ Rosatom is not just in charge of Russia's nuclear power, it maintains Russia's nuclear weapons too (see Box C), and officially controls the Russian Arctic sea route.⁷¹ Rosatom has played an active role in the Ukraine war by sending teams to the two Ukrainian nuclear power plants – Europe's largest nuclear facility Zaporizhzhia, and the now-defunct Chernobyl – that Russia attacked and occupied in March 2022.⁷² Russia's attacks on these nuclear installations shockingly illustrated the vulnerability of nuclear infrastructure. Despite this, proponents of nuclear power have responded to Russia's invasion and nuclear threats with calls for lifetime extensions of ageing nuclear power plants, and pushed for new built nuclear capacity in the EU. The inclusion of nuclear in the Taxonomy will spur this on, and could lead to investment decisions that do not make sense on economic, environmental or security grounds.

For Russia, exports of nuclear goods and services are a political and economic priority, and a key element of its geopolitical agenda, as demonstrated by the generous loans backed by government subsidies that it offers to third countries which make deals with Rosatom.⁷³ Russia is also one of the biggest exporters of uranium and nuclear fuels to the EU, valued at €380 million in 2019,⁷⁴ and estimated to represent 20% of the EU's uranium imports.⁷⁵ It was for these reasons that the EU's 2014

Energy Security Strategy stressed the importance of fuel supply diversification and the need for new nuclear power plants not to depend solely on Russian fuel.⁷⁶ Despite this, the share of Russian uranium in overall EU imports has actually increased, from 18% in 2014 to 20% in 2020.⁷⁷

Rosatom has spun its web through Europe's nuclear industry, creating dependencies:

Through its many subsidiaries, joint ventures and business dealings, covering all parts of the nuclear production chain, Rosatom is entangled in Europe's nuclear industry (see Table 1), creating a significant degree of dependency on the Russian state-owned firm. Specific nuclear reactors, for example, require specific kinds of fuel, so when Rosatom builds a reactor – as in Finland, Hungary, Bulgaria, Slovakia and the Czech Republic – it will mostly also supply its fuel.⁷⁸ The complex technology means that buying a reactor from Rosatom generates a decades-long dependency, from operation and maintenance to management of spent fuel.⁷⁹ Rosatom's construction of nuclear power plants in Europe has been described as having an economic effect "comparable to that of a gas pipeline."⁸⁰ There are currently 18 Russian designed reactors in the EU⁸¹, all of which rely on Russia for their supply of nuclear fuel and other services.

The Taxonomy is set to hand a lifeline to nuclear energy, and Rosatom is *already* directly involved in the construction of new nuclear plants in Finland and Hungary (see Table 1), and part of plans to develop new plants and extend the lifetime of existing plants in Bulgaria and Slovakia.⁸² With the average nuclear plant in Europe costing more than €10 billion⁸³ – these

projects would generate substantial revenue for Rosatom.

Table 1: ROSATOM'S WEB OF INFLUENCE: A glimpse of how the Russian state company is entwined in Europe's nuclear industry*

*As of the start of Russia's Ukraine invasion; it should be noted that some companies have since (partially) cut ties with Rosatom

Country	Entity	Relationship
France	EDF	Decades of complex and entrenched business dealings with Rosenergoatom, at all levels of nuclear production chain; new deals as recently as Feb 2022. ⁸⁴
	Framatome (successor of Areva)	Cooperates with Rosatom's TVEL to supply nuclear fuel to reactors in Europe, and signed long-term cooperation agreement with Rosatom in 2021. ⁸⁵
	Orano (successor of Areva)	Sends reprocessed uranium to Russia, and in 2019 signed deal with Rosatom to build a deconversion plant for depleted uranium. ⁸⁶
	Alstom	Part of Alstom-Atomenergomash, a joint venture with Rosatom to develop half-speed turbines. ⁸⁷
	Assystem	Signed Memorandum of Understanding with Rosatom's RASU JSC in 2019. ⁸⁸
Finland	Fennovoima	Joint venture between Voimaosakeyhtiö (part-owned by Fortum) and Rosatom's ROAS JSC to build Hanhikivi 1 nuclear plant in Finland. However Fennovoima canceled its contract with ROAS JSC in MAY 2022. ⁸⁹
	Fortum	Imports nuclear fuel from Russia for Loviisa nuclear plant, plus has an ongoing contract with Rosatom's TVEL until 2030. ⁹⁰ Fortum's interests in Russia (coal power, heating plants, hydro), were leveraged in the Hanhikivi 1 nuclear joint venture with Rosatom. ⁹¹
Hungary	MVM Group	Hired Rosatom to build the PAKS II nuclear plant in Hungary, and has joint venture with Rosatom called European Power Services, to service and maintain nuclear plants, including PAKS. ⁹²
Germany	NUKEM Technologies GmbH	100% Rosatom-owned technology firm active in decommissioning nuclear plants and management of radioactive waste and spent fuel across Europe. ⁹³
Germany/ Netherlands/UK	Urenco	Delivered 45,000 tons of depleted uranium to Russia over 25 years (as recently as 2020), officially for re-enrichment, but in reality mostly for storage. ⁹⁴
Sweden	Vattenfall	Has a deal for supply of nuclear fuel from Rosatom's TVEL up till 2025. ⁹⁵
Czech Republic	ČEZ	Gets its nuclear fuel from Rosatom's TVEL, and signed new deal in 2019. ⁹⁶

The French nuclear industry, by far the EU's biggest, works closely with Rosatom at all levels of the production chain, from the exploitation of uranium and treatment of waste, to the construction of power plants and their operation.⁹⁷ Russia has 43% of the global uranium enrichment capacity, and produced around one third of the world's uranium hexafluoride in 2020, a substance used in the enrichment process.⁹⁸ Rosatom provides 24% of Europe's uranium conversion services, while another 28% is provided by French company Orano, which has close ties and formal cooperation agreements with Rosatom.⁹⁹ Rosatom's subsidiary Tenex/TVEL provides 26% of the EU's uranium enrichment services,¹⁰⁰

while its main competitor, Urenco, is dependent on TVEL for part of its waste management. (See Table 1). State-founded Russian think tank RIAC noted that Rosatom's revenues from foreign orders of nuclear power plants are significant, "highlighting the economic potential of a switch of energy relations from fossil fuels to nuclear power".¹⁰¹ There is little doubt that Russia sees the world's efforts to wean itself off fossil fuels as an opportunity for increased dependence on Russia's nuclear expertise and resources. It would, therefore, be a grave mistake to buy into the narrative that classifying nuclear as a 'sustainable' investment will reduce Europe's energy dependency on Russia.

Box C: Waste, Weapons and Winning a Reprieve

Waste:

Nuclear lobbies like to blow the low-carbon trumpet, but this cannot disguise the fact that nuclear energy produces radioactive waste that future generations will still have the responsibility of managing in several centuries time.¹⁰² What's more, Russia plays a crucial role in the management and storage of nuclear waste from Europe. As a result of the lack of final solutions for waste storage, the Southern Urals and Siberia function as a supposedly temporary storage site for thousands of tonnes of depleted uranium residues from spent nuclear fuel reprocessing and uranium enrichment conducted in the EU.¹⁰³ France and Germany have both caused controversy in the last couple of years for relying on Russia for uranium enrichment¹⁰⁴ and for the disposal of radioactive waste.¹⁰⁵

Weapons:

It must not be forgotten that Rosatom is also in charge of Russia's nuclear weapons – in other words, **there is no effective separation between Russia's commercial and military nuclear programs**. Depleted uranium is also a feedstock for blanket material in fast reactors and as such could be used for the production of plutonium in Russia – plutonium that remains outside international safeguards, and is of potential use in Russia's nuclear weapons programme.¹⁰⁶

Winning a reprieve, at the expense of renewables:

Nuclear energy threatens to push out more effective investments towards an energy transition because of its high costs. At a minimum, it is expected that the inclusion of nuclear in the Taxonomy will slow down the phase out of nuclear that has happened in the last decade.¹⁰⁷ Despite this, the inclusion of nuclear in the Taxonomy creates opportunities for Russia to tap into the potential investment volume for nuclear estimated by Commissioner Thierry Breton at up to €500 billion by 2050.¹⁰⁸

How Rosatom's interests are lobbied for in Brussels:

Rosatom is not only intertwined with Europe's nuclear industry, it also has many links with the nuclear lobbies that have been pushing so successfully for the inclusion of nuclear in the EU Taxonomy. 9 out of 11 of the top nuclear companies and industry groups by lobby spend and resources – as identified in Reclaim Finance's 2021 investigation into the nuclear industry's Taxonomy lobbying – have direct or indirect links to Rosatom.¹⁰⁹ Digging a little deeper, there are even more ties to be found.

Currently, Rosatom's only entry in the EU lobby register is as Rusatom International Network (RAIN) – in charge of “international sales and promotion of the products of Rosatom nuclear energy sector” – which declares the Taxonomy to be one of the main EU files it lobbies on.¹¹⁰ Rosatom subsidiaries Rosatom France, Atomenergoprom and AtomEnergPromSbyr, however, were signed up to the lobby register in previous years – with the former hiring at least two consultancies, and the latter two having top-level Commission meetings.¹¹¹ German subsidiary Nukem Technologies, meanwhile, is listed as a member of Internationaler Wirtschaftssenat, an ‘NGO’ that promotes its corporate member's interests.¹¹² And that's still just the tip of the iceberg.

Using the World Nuclear Association to win Taxonomy:

Rosatom is a board member of the **World Nuclear Association (WNA)**.¹¹³ In its lobby register entry, the WNA declares lobbying on the Taxonomy, as well as its participation in the European Nuclear Energy Forum (ENEF), a group which brings together EU governments, MEPs and the nuclear industry.¹¹⁴ In its Spring 2020 submission to the Commission's Taxonomy consultation, WNA argued that investment into existing and new nuclear plants “should be recognized as sustainable and benefit from inclusion in the taxonomy”.¹¹⁵ It also criticised a

report by the technical expert group that advised the Commission against including nuclear due to radioactive waste breaching the Do No Significant Harm (DNSH) principle: WNA claimed this ignored “the consensus scientific view” and “dramatically undermines the entire taxonomy”.¹¹⁶ WNA insisted that nuclear would contribute to Europe's energy resilience “by reducing the dependence on volatile imported fossil fuels” – but as we have noted, the reliance on Rosatom for nuclear fuel, reactors and technology creates its own dependence.

WNA said “nuclear can form the ‘backbone’ of the reliable energy system” that we need. Attributing the term ‘backbone’ to nuclear energy is a misrepresentation of an earlier European Commission statement – which actually called renewable energy sources the backbone of a carbon-free power system.¹¹⁷ WNA also supported calls “to establish a group of experts with an in-depth knowledge of the nuclear life-cycle” to assess the issue “in time for nuclear to be included in the first round of Delegated Acts.” The Commission succumbed to this pressure, giving the task to its own Joint Research Centre (JRC), which in March 2021 gave a favourable assessment of nuclear.



Rosatom criticises Greenpeace, praises ‘Voices for Nuclear’

In May 2021, Rosatom published a newsletter lauding the JRC report, which it said “concluded that nuclear energy is comparable to, or even outperforms, renewable energy sources” on certain parameters (but notably not including radioactivity or waste).¹¹⁸ Rosatom added that despite all of the JRC’s evidence, “Greenpeace stooped so low as to suspect JRC experts of a biased attitude”. The Russian state nuclear giant went on to quote Greenpeace’s March 2021 briefing that expresses concern over the JRC’s objectivity, given its “structural links with the Euratom Treaty, its relations with the nuclear industry and the views expressed publicly by JRC members on nuclear energy”.¹¹⁹

It should be noted, however, that criticism of the JRC report was, in fact, quite widespread. For example, the Okologie Institut noted that the JRC failed to evaluate several aspects of the DNSH principle, including the risk of accidents in extended-life nuclear plants, the long term consequences of nuclear waste repositories, and the potential impact of radioactive contamination of water and marine resources.¹²⁰ The German Federal Office for the Safety of Nuclear Waste Management, meanwhile, referred to the JRC’s “incomplete view” of the consequences and risks of nuclear for people, environment and future generations, some of which it “does not even mention”.¹²¹

Nonetheless, Rosatom elaborated that “Not every NGO shares the viewpoint of Greenpeace”, citing a March 2021 letter to European Commission President Ursula von der Leyen from dozens of “NGOs from different countries”. Rosatom quotes this letter – which argues that decarbonisation will fail without the inclusion of nuclear – at length. The signatories of the letter are a collection of pro-nuclear groups, and the organisation that sent the letter,

Voices for Nuclear, gets funding from “companies affiliated with the nuclear industry”.¹²² Despite insisting that it is not a nuclear lobby, the board of directors of Voices for Nuclear includes the CEO of Framatome (among the first to “support its creation”) and the head of the World Nuclear Association (of which Rosatom is a member).¹²³ Its lobby register entry (under its French name, Les Voix du Nucléaire¹²⁴) reveals that its main funders are Framatome and Orano.¹²⁵ Additionally, Reclaim Finance notes that Voices of Nuclear identifies Société Française d’Energie Nucléaire (SFEN) among its “friends” – and SFEN’s partners include the Nuclear Society of Russia, which is represented on Rosatom’s Public Council.¹²⁶

Influencing the EU through Finnish joint venture Fennovoima:

Rosatom states that it “took part in the open discussion of the draft taxonomy and Delegated Act, which were made available online for expert review and comments in accordance with the established procedure.” However, we have been unable to identify any Taxonomy consultation responses from Rosatom.¹²⁷ Its interests are nonetheless represented by other actors – not just WNA, SFEN, and many of the companies it has strong ties with (see Table 1), but Rosatom’s Finnish joint venture **Fennovoima**.

Finland’s newest nuclear power company is planning to build the Hanhikivi 1 nuclear power plant, with RAOS Project, which is part of the Rosatom Group.¹²⁸ RAOS Project is a 34% co-owner of Fennovoima, together with Finnish company Voimaosakeyhtiö (which is itself part-owned by Fortum).¹²⁹ Furthermore, in one of the clearest examples of what dependency can mean in political terms, Russia reportedly exerted political and economic pressure on Finland in 2014 to force the Finnish company Fortum (which has extensive assets in the heat and power sector in Russia) to take a bigger share in

Fennovoima, in order to meet domestic financing requirements.¹³⁰ There are also indications that Rosatom had attempted to gain a larger share in the project than it was legally permitted, through a Croatian front-company called Migrit Energija.¹³¹

Despite opposition, the Fennovoima joint venture was approved in 2014 following Russia's annexation of Crimea.¹³² Fennovoima's lobby register entry – which makes no mention of Rosatom – names the same consultancy previously hired by Rosatom France, Sass Consulting.¹³³ Investigations have indicated that Sass Consulting ran a political and media PR campaign that was instrumental in getting the Fennovoima project approved, including by helping to blur links with Rosatom.¹³⁴ In Spring 2022, however, after Russia's invasion of Ukraine, Finland's Minister of Economic Affairs, Mika Lintila, reportedly said it would be "absolutely impossible" for the government to grant a construction permit for the Hanhikivi plant; despite this, Rosatom's subsidiary ROAS was continuing its "preparatory construction work" in accordance with its contract.¹³⁵ On 2 May 2022, Fennovoima announced it had cancelled its contract with RAOS, citing RAOS Project's inability to deliver the contract and risks arising from the war in Ukraine which could not be mitigated.¹³⁶

Nonetheless, prior to this and throughout the taxonomy legislative process, Fennovoima has been an active lobby on the Taxonomy. Records of MEPs' lobby meetings – which are unfortunately far from complete, as it is not mandatory for MEPs to declare them – reveal that Fennovoima had at least three MEP meetings in May 2021, including one on the taxonomy.¹³⁷ One of these meetings was with Finnish centre-right EPP MEP Petri Sarvamaa. Just over a month later, Sarvamaa co-signed an MEP letter to five Commissioners calling for the inclusion of nuclear energy in the Taxonomy.¹³⁸

What's more, Fennovoima's response to the Commission's Spring 2020 Taxonomy consultation – which again makes no mention of Rosatom – says it is "vital that the critical role of nuclear power is recognized in the taxonomy. Otherwise, the ambitious climate targets cannot be met."¹³⁹ Fennovoima focuses on nuclear energy's low emissions, while presenting the issue of nuclear waste as solved,¹⁴⁰ and pushing for a "technology-neutral" approach. Acceptance of the technology neutral principle has been key to the nuclear industry's success in infiltrating the taxonomy, by redirecting attention from its harmful characteristics to its low-carbon credentials.¹⁴¹ As Reclaim Finance notes, the application of this principle to nuclear power "minimizes its specificities – notably regarding radiation"; comparing solar and nuclear only on the basis of carbon emissions, for example, "draws a rather incomplete picture that closely aligns with the narrative of nuclear advocates"¹⁴².

Fennovoima in the background of nuclear lobby FORATOM:

Fennovoima's lobby register entry lists a large number of associations that it is a member of, notably including Brussels' main nuclear lobby group **FORATOM**.¹⁴³ FORATOM was, until January 2022, led by Esa Hyvärinen, the former head of the CEO office of Fortum (which also has a stake in Fennovoima).¹⁴⁴ FORATOM has been very active in the Taxonomy debate,¹⁴⁵ complaining that "the issue of waste" had been used "as an excuse not to include this low-carbon technology".¹⁴⁶ FORATOM also emphasised "technology neutrality", and after nuclear was included, further argued that it should be treated on a completely "equal footing" with renewables.¹⁴⁷ FORATOM had at least eight meetings with MEPs in 2019-21, including on the taxonomy,¹⁴⁸ and three of the MEPs it met with subsequently formed a

pro-nuclear MEP club (see below).

MEP nuclear club and Commissioner Simson at Rosatom-sponsored WNE:

In November 2021, centre-right EPP MEP Tomas Tobé, liberal Renew MEPs Karin Karlsbro and Christophe Grudler were among the co-founders of a new parliamentary network on the future of nuclear “as a decarbonized, cost-effective and reliable energy source.”¹⁴⁹ The MEP club’s priorities include “the inclusion of nuclear in the European taxonomy”, and one of its first activities was a “parliamentary mission” at the **World Nuclear Exhibition (WNE)** in Paris, as a “first opportunity to gather the members”. The WNE, organised by French nuclear lobby group Gifen, took place 30 November-2 December 2021, and its “platinum sponsors” included none other than Rosatom.¹⁵⁰

The keynote speech at the 2021 WNE was given by Energy Commissioner Kadri Simson, who noted it was the first time a European Commissioner had ever spoken at the event. Simson echoed the industry’s pro-nuclear ‘technology neutrality’ argument, by saying that while the EU is neutral towards different energy technologies, it recognises the “contribution that each of them can bring” towards decarbonisation, including nuclear.¹⁵¹ Simson also referred to the “growing sense of realism” about the need to complement renewables with baseload electricity production. However, the outdated idea of a ‘baseload’ primarily serves the interests of big energy companies rather than the needs of a flexible, decentralised renewable energy system.¹⁵³

Commissioner Simson also took the opportunity to give the Rosatom-sponsored WNE a big hint that she was in favour of nuclear energy. Simson said that without immediate investment in existing nuclear plants, most would be shut

down by 2030 “when they will be needed the most”. That’s why the upcoming delegated act, Simson promised, would provide certainty and “chart the way forward for many of you in the industry at a key point in time when investments are being considered”. In case that hint wasn’t strong enough, she finished by adding that “if EU Member States wish to continue to rely on this energy source and exploit its remarkable potential for low carbon energy generation, including for hydrogen production for instance, if industry wants to live up to these new expectations around nuclear, everyone has to evolve, invest, change.”¹⁵³

Rosatom boss and Commission Energy official speak side-by-side in December 2021:

Nor was Simson’s the only Commission intervention at the WNE. As well as hosting a stand at the event,¹⁵⁴ the Commission sent its Deputy Director-General for Energy Massimo Garribba to speak on a Rosatom-organised high-level panel discussion on the role of nuclear in addressing the climate crisis.¹⁵⁵ Garribba spoke alongside Rosatom’s Director General Alexey Likhachev, who emphasised nuclear’s low emissions credentials and described the UN climate talks COP26 as a paradigm shift in the acceptance of nuclear. The Rosatom boss thanked “our partners from France”, saying it was France and Russia’s presidents who had set the “fact-based and evidence-based” tone - “such an offensive, in a good way”.¹⁵⁶ Garribba, meanwhile, thanked Rosatom for organising the panel, and reiterated some of the facts Likhachev gave about nuclear in the EU (“As DG Likhachev has said very rightly”), concluding that “all the tools” are needed to meet the EU’s 2050 target.¹⁵⁷ Simson and Garribba’s glowing speeches at the Rosatom-sponsored nuclear industry event just months before

Russia invaded Ukraine stand in stark contrast to the Commission’s more recent anti-Russia rhetoric, with Simson, for example, strongly condemning Russia’s actions at Zaporizhzhia and Chernobyl, demanding an “end to aggressor’s military attacks against & presence at nuclear sites”.¹⁵⁸ At the WNE, however, both Energy Commissioner Simson and Rosatom boss Likachev used the argument that nuclear helps to reduce reliance on imported fossil fuels. This glosses over the ten-year lead in time to build new nuclear plants, and the fact that their colossal costs channel investment away from renewables like wind and solar, which can be built much faster, thereby reducing reliance on fossil fuels in a far more immediate way (not to mention producing electricity at a far lower cost).¹⁵⁹ Likachev, nonetheless, cited the fact that Europe imports 80% of its gas as a reason for the EU to develop its nuclear industry. When Russia’s state-controlled nuclear company – whose management is appointed by Putin, whose strategy is validated by the Russian government,¹⁶⁰ and which controls Russia’s arsenal of nuclear weapons – is telling decision makers to prioritise nuclear in order to reduce gas dependency, it’s time to take a step back. And to remember that Rosatom is deeply entwined with Europe’s nuclear industry (see Table 1), which creates long-lasting dependencies of its own kind.

EDF's entrenched ties and shared lobbying goals with Rosatom:

EDF, for example – of which France is the main shareholder¹⁶¹ – has deep, long-term ties with Rosatom (see Table 1). In 2017, Rosatom subsidiary Rosenergoatom celebrated 25 years of cooperation with EDF, boasting of its “exclusive partnership” covering “every stage of power station operations, from designing

reactors to their commissioning.”¹⁶²

EDF’s CEO spoke alongside Likachev on Rosatom’s high-level panel, and the two companies signed a joint declaration for long-term nuclear R&D during the WNE, following an April 2021 agreement on nuclear-based hydrogen.¹⁶³ EDF also pushed hard to get nuclear in the Taxonomy, demanding a technology neutral approach and railing against the excuse of “some unspecified, potential harm to other environmental objectives” that led to it initially not being recommended for inclusion.¹⁶⁴ EDF has had an impressive 50 meetings with MEPs, including two solely on the subject of the Taxonomy (though it may have been discussed at others), plus 52 top-level Commission meetings, including 4 specifically on sustainable finance/the Taxonomy.¹⁶⁵



Greenpeace France volunteers protest the maintenance of commercial relations between the French nuclear industry and Rosatom at EDF headquarters in Paris.

France and other Rosatom-linked member states drive push for nuclear in Taxonomy:

Rosatom's ties with France go beyond EDF, as Table 1 shows. According to Urgewald and Ecodefense, France, which produces 70% of its electricity from nuclear, is Rosatom's No. 1 client in Western Europe.¹⁶⁶ In May 2021, Rosatom wrote that the inclusion of nuclear in the Taxonomy is important for France, praising a letter from French President Macron and the leaders of six other EU countries to the European Commission, and quoting its description of nuclear as a necessary "low-emission baseload".¹⁶⁷ Other signatories also have strong ties with Rosatom, such as Hungary, where Rosatom is building the Paks II nuclear plant, to be serviced by a Rosatom joint venture with Hungary's MVM.¹⁶⁸ Likewise, the Czech Republic, where President Miloš Zeman until recently lobbied heavily for Rosatom to be included in new nuclear projects.¹⁶⁹ And not forgetting Slovakia,¹⁷⁰ which is currently finalising the construction of Russian-designed nuclear reactors Mochovce 3 and 4, supplied by fuel from Rosatom;¹⁷¹ and Bulgaria, which has an on-off relationship with Rosatom concerning its returning plans to build a new nuclear power station at Belene.¹⁷²

An Insatiable appetite? Rosatom sees Taxonomy win as important step but wants even more:

In February 2022, Rosatom called the Commission's new delegated act including nuclear an important step in global recognition of nuclear as safe and sustainable. Rosatom complained, however, that "controversial" technical screening criteria would "restrict investments", such as time limits for the extension of existing nuclear plants, and the requirement to use accident-tolerant fuel.¹⁷³ In other words, like FORATOM, Rosatom wants even more favourable conditions for nuclear energy.



"For a nuclear-free Europe!" is projected on a cooling tower of the Grohnde nuclear power plant in Lower Saxony, Germany, which closed after 36 years in operation

4. CONCLUSION

Russian state-owned companies like Gazprom and Rosatom, and state-linked oil giant Lukoil – together with lobby groups and joint ventures that represent them, such as Gas Infrastructure Europe, the World Nuclear Association, and Fennovoima – have been actively lobbying to get gas and nuclear included in the EU's sustainable finance Taxonomy. And the Commission has given them exactly what they want.

Passing the Commission's second delegated act would pave the way for the greenwashing of – and consequent increase in – investments in fossil gas and nuclear projects. This would be a disaster for the climate and environment, but a financial boon to Russia.

Russia's war in Ukraine has brought Europe's dependency on Russian gas back into the spotlight – with the EU sending Putin nearly €44 billion for fossil fuels during the first two months of the invasion. If the Taxonomy's new gas rules are fully utilised, Europe could be filling Russia's treasury with an extra €4 billion a year. And nuclear energy cannot provide a way out, because the EU's nuclear industry is highly dependent on, and interconnected with, Rosatom. A green light for increased investments in nuclear plays into Russia's hands, making it more difficult to reduce EU dependency on Russia.

Our investigation has uncovered lobbying links that resemble Russian dolls, and Russian fossil fuel and nuclear companies that *still* have access passes to the European Parliament or are members of official alliances, like Rosneft in Commission' hydrogen club ECH2A. In spite of all the rhetoric and sanctions, the door is still open for Russian energy interests to influence decision-makers. That door must be closed, with access passes and memberships retracted for all Russian fossil fuel and nuclear companies, their subsidiaries, and lobby organisations that retain them as members – with participation in events in any way linked to them prohibited.

Russian interests were embedded in the lobbying by both the gas and nuclear industries on the Taxonomy. The Commission's February 2022 delegated act is set to entrench Europe's dependence on Russian gas, uranium and nuclear infrastructure and services, and undermine the EU's efforts to increase its independence from Russia. It is a lucrative opportunity for Russia, one which could help finance its military aggression – like Putin's devastating invasion of Ukraine – while giving Russia even greater bargaining power over Europe.

That is why Greenpeace calls on MEPs to reject the delegated act on nuclear and gas.

REFERENCES

1	Article 9 of the Taxonomy Regulation states the six environmental objectives, namely: climate change mitigation; climate change adaptation; the sustainable use and protection of water and marine resources; the transition to a circular economy; pollution prevention and control; the protection and restoration of biodiversity and ecosystems. See https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN
2	Reuters, EU plan to label gas and nuclear as green could mislead investors, advisers say, 24/01/22, https://www.reuters.com/markets/europe/eu-plan-label-gas-nuclear-green-could-mislead-investors-advisers-sa-y-2022-01-24/
3	Eurostat, From where do we import energy? https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html ; Nuclear energy statistics, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Nuclear_energy_statistics#Uranium_supply_security
4	Energy Intelligence, Russian Energy Minister Shulginov Outlines Gas Stance, 22/02/22, https://www.energyintel.com/0000017f-1d0f-df96-a1ff-bf6f490e0000
5	Russia's fossil gas criteria in its own taxonomy are in fact closer to the recommendations made by the technical expert group that advised the Commission against including gas, by setting an emissions threshold for electricity generation of 100gms CO ₂ e/kWh. See Andreas Hoepner, EU must not become climate laggard over Taxonomy, 30/11/21, in IPE, https://www.ipe.com/viewpoint-eu-must-not-become-climate-laggard-over-taxonomy/10056663.article
6	Rosatom, Russia leading the way by giving nuclear power green energy status – Rosatom Director General, 29/09/21, https://rosatom.ru/en/press-centre/industry-in-media/russia-leading-the-way-by-giving-nuclear-power-green-energy-status-rosatom-director-general/
7	Energy Post, EU Taxonomy: labelling Gas “green” is a gift to Putin, 08/02/22, https://energypost.eu/eu-taxonomy-labelling-gas-green-is-a-gift-to-putin/
8	European Parliament, MEPs demand full embargo on Russian imports of oil, coal, nuclear fuel and gas, 07/04/22, https://www.europarl.europa.eu/news/en/press-room/20220401IPR26524/meps-demand-full-embargo-on-russian-imports-of-oil-coal-nuclear-fuel-and-gas
9	Elizabeth Meager, What the inclusion of nuclear and gas in the EU taxonomy means, in Capital Monitor, 21/02/22, https://capitalmonitor.ai/factor/environmental/what-the-inclusion-of-gas-and-nuclear-in-the-eu-taxonomy-means/ . By contrast, 40% of asset managers exclude coal investments.
10	Jennifer Laidlaw, What the inclusion of gas and nuclear in the EU taxonomy could mean for investors and asset managers, in S&P Global, 22/02/22, www.spglobal.com/esg/insights/what-the-inclusion-of-gas-and-nuclear-in-the-eu-taxonomy-could-mean-for-investors-and-asset-managers
11	Zsolt Davras, A European climate fund or a green golden rule: not as different as they seem, 03/02/2022 https://www.bruegel.org/2022/02/a-european-climate-fund-or-a-green-golden-rule-not-as-different-as-they-seem/
12	Andreas Hoepner, Taxonomygate, in Environmental Finance, 10/02/22, www.environmental-finance.com/content/analysis/taxonomygate.html
13	Global Energy Monitor, Global Gas Plant Tracker, https://globalenergymonitor.org/projects/global-gas-plant-tracker/
14	Andreas Hoepner, Taxonomygate, <i>ibid.</i>
15	European Commission, Speeding up European climate action towards a green, fair and prosperous future, November 2021, page 40 https://ec.europa.eu/clima/system/files/2021-11/policy_strategies_progress_com_2021_960_en.pdf
16	IEA, How Europe can cut natural gas imports from Russia significantly within a year, 03/03/22, https://www.iea.org/news/how-europe-can-cut-natural-gas-imports-from-russia-significantly-within-a-year
17	Eurostat, Extra-EU imports of energy products, April 2022, https://ec.europa.eu/eurostat/statistics-explained/images/5/5f/Excel_file_energy_article_april_2022.xlsx See TTF prices at https://www.theice.com/products/27996665/Dutch-TTF-Gas-Futures/data?marketId=5372695&span=3
18	Andreas Hoepner, Giant Greenwash: can 1.4 billion of fossil gas CO ₂ e emissions really be declared "green by law"? https://www.linkedin.com/pulse/giant-greenwash-can-14-billion-tons-fossil-gas-co2e-really-hoepner
19	When using the average value of Russian gas imports in the first half of 2021, the total value would be €10 billion. Since then average gas prices have gone up substantially.
20	As of 28/04/22. The EU has however said EU companies should not pay for Russian gas in roubles, as Putin demanded, though they may still work around this and pay in euros/dollars. See, e.g. Reuters, EU says pay for Russian gas in euros to avoid breaching sanctions, 23/04/22, https://www.reuters.com/business/energy/eu-says-gas-payments-may-be-possible-under-russian-roubles-proposal-without-2022-04-22/ ; BBC, Ukraine War: Russia gas supply cuts 'blackmail', says EU, 28/04/22, https://www.bbc.co.uk/news/world-europe-61240499

21	CREA, Financing Putin's war on Europe: Fossil fuel imports from Russia in the first two months of the invasion, april 2022 https://energyandcleanair.org/wp/wp-content/uploads/2022/04/Fossil-fuel-imports-from-Russia-first-two-months-of-invasion.pdf In addition, payments to Russia for fossil fuels by the European Union since 24 February 2022, https://crea.shinyapps.io/russia_counter/?tab=methodology .
22	Politico, EU weighs ban on Russian oil over war crimes as pressure builds on Berlin, 04/04/22, https://www.politico.eu/article/pressure-mounts-on-berlin-to-block-russian-oil/
23	OECD, World statistics: Russia, https://oec.world/en/profile/country/rus as of 01/04/22
24	Politico, How Europe is funding Putin's war, 24/02/22, https://www.politico.eu/article/europe-eu-oil-gas-trade-russia-budget-military-spending-ukraine-war-crisis/
25	Transparency Register, Gazprom, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=622135013267-04 , as of 18/04/22. NB. Lists of Commission meetings only cover meetings held with Commissioners, Members of their Cabinet or Director-Generals since 01/12/2014 under an entity's current ID number in the Transparency Register.
26	Transparency Register, Gazprom, ibid. "Membership of any associations/(con)federations/networks or other bodies: N/A"
27	Transparency Register, Association française indépendante de l'électricité et du gaz (AFIEG), https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=131845233229-49 as of 18/04/22.
28	Gas Infrastructure Europe, Members, https://www.gie.eu/dna/members/ as of 18/04/22.
29	RFE/RL, Nord Stream 2 Operator, Gazprom Say New Pipeline Ready To Deliver Gas, 29/12/21, https://www.rferl.org/a/russia-nord-stream-filled-gas/31632027.html ; Clean Energy Wire, Sustainable finance principles could have reduced EU's energy dependence on Russia - finance expert, 18/03/22, https://www.cleanenergywire.org/news/sustainable-finance-principles-could-have-reduced-eu-energy-dependence-russia-finance-expert
30	Reuters, German regulator takes over Gazprom Germania to ensure energy supply, 04/04/22, https://www.reuters.com/business/energy/german-regulator-takes-over-gazprom-germania-ensure-energy-supply-2022-04-04/
31	Transparency Register, Gas Infrastructure Europe, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=76130992074-15 as of 18/04/22. As of 09/05/22, Gas Infrastructure Europe is no longer appearing in the Transparency Register search results, but its entry can still be accessed on lobbyfacts, at https://lobbyfacts.eu/representative/58886f5699674134b9f375ed8b70fbc6/gas-infrastructure-europe
32	Transparency Register, Gas Infrastructure Europe, ibid. NB. EC meetings since 01/12/2014.
33	Transparency Register, Gas Infrastructure Europe, ibid.; Corporate Europe Observatory, Lobbying under the radar continues: MEP-industry forums still avoid scrutiny, 12/10/15, https://corporateeurope.org/en/power-lobbies/2015/10/lobbying-under-radar-continues-mep-industry-forums-still-avoid-scrutiny
34	Reclaim Finance, Out with Science, In with Lobbyists: Gas, Nuclear and the EU Taxonomy, July 2021, https://reclaimfinance.org/site/en/2021/07/22/out-with-science-in-with-lobbyists-gas-nuclear-and-the-eu-taxonomy/
35	Transparency Register, NOVE, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=522122412613-18 , as of 18/04/22.
36	Gazprom Export listed as a client of G Plus Ltd (t/a Portland) in its 2019 entry, https://lobbyfacts.eu/representative/e9fd5b34c9a14f058f94f8c9909f061d/g-plus-ltd-t-a-portland ; European Gas Forum (EGaF - Centrica, ENI, EON Ruhrgas, Gazprom Export, GDF Suez, Qatar Petroleum, Shell, Statoil) listed as a client of Edelman Public Relations Worldwide in its 2014 entry, https://lobbyfacts.eu/representative/88377d3dff1f4e42a61e2a4805227f66/edelman-public-relations-worldwide .
37	Transparency Register, Gas Infrastructure Europe, ibid.
38	Document 36, European Commission/GasNaturally 5 May 2021 Ares(2021)2958013, available in zip folder https://www.asktheeu.org/en/request/9445/response/32828/attach/4/Documents%201.zip?cookie_passthrough=1

39	See Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
40	According to lobbyfacts, NIS used to be signed up to the EU Transparency Register, in 2012, https://lobbyfacts.eu/representative/17426b592a884b3ea14ac54cbb3e46bd/petroleum-industry-of-serbia
41	BREC, Original Founding Members, https://brusselsenergyclub.org/ ; NIS, Company Information, https://www.nis.rs/en/company-information/
42	See, e.g. List of Participants, Brussels Energy Club Meeting October 10, 2019, 'Implementation of large-scale energy infrastructure projects with transboundary environmental impact assessment' with guest speakers Milena Novakova, Legal and Policy Officer, Mainstreaming & Environmental Assessments, DG Environment, and Simon Bonnell, Head of Permitting, Nord Stream 2 AG, https://brusselsenergyclub.org/get_file/id/brec-list-of-participants-oct-10-2019.pdf
43	BREC, Meeting: 7 April 2022, European gas supply in roubles and the future of the EU-Russia gas relationship, https://brusselsenergyclub.org/events/id/meeting-7-april-2022-european-gas-supply-in-roubles-and-the-future-of-the-eu-russia-gas-relationship-180/
44	BREC, Meeting: October 6, 2021: Russia's Climate Strategy: opportunities and challenges, https://brusselsenergyclub.org/events/id/meeting-october-6-2021-russias-climate-strategy-opportunities-and-challenges-176/
45	BREC, Meeting: February 20, 2020: Gazprom on the European market: new gas pipelines and old gas transit, https://brusselsenergyclub.org/events/id/meeting-february-20-2020-gazprom-on-the-european-market-new-gas-pipelines-and-old-gas-transit-162/
46	BREC, Meeting: February 20, 2020: Gazprom on the European market, <i>ibid.</i>
47	Lobbyfacts, Rosneft Deutschland GmbH, https://lobbyfacts.eu/representative/243291b7abf04034b7715983ef2959a1/rosneft-deutschland-gmbh
48	Lobbyfacts, Rosneft Deutschland GmbH, <i>ibid.</i> EU Observer, Lobby links with Russian oil giant Lukoil look hard to break, 23/03/22, https://euobserver.com/world/154555
49	European Commission, European Clean Hydrogen Alliance, https://ec.europa.eu/growth/industry/strategy/industrial-alliances/european-clean-hydrogen-alliance_en , as of 26 April 2022, which provides a hyperlink to a 'List of current members', leading to the following webpage: European Clean Hydrogen Alliance Members, Document date: 13/09/2021 - Created by GROW.I.1 - Last update: 25/02/2022, https://ec.europa.eu/docsroom/documents/48994/attachments/1/translations/en/renditions/native
50	Friends of the Earth Europe, The EU's Industry Alliances: The new corporate capture that threatens democracy and the environment, April 2021, https://friendsoftheearth.eu/wp-content/uploads/2021/05/The-EUs-Industrial-Alliances.pdf
51	European Commission, European Clean Hydrogen Alliance, https://ec.europa.eu/growth/industry/strategy/industrial-alliances/european-clean-hydrogen-alliance_en
52	S&P Global, Global Gas: Russia bets on hydrogen future as pressure for cleaner fuel mounts, 17/09/21, https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/091721-global-gas-russia-bets-on-hydrogen-future-as-pressure-for-cleaner-fuel-mounts
53	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
54	Transparency Register, Lukoil, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=04927146320-85 , as of 26/04/22
55	The Guardian, Cambridge Analytica: links to Moscow oil firm and St Petersburg university, 17/03/18, https://www.theguardian.com/news/2018/mar/17/cambridge-academic-trawling-facebook-had-links-to-russian-university
56	Forbes, Russian Billionaire Alekperov Resigns As Lukoil CEO Amid Sanctions Over Ukraine, 21/04/22, https://www.forbes.com/sites/annakaplan/2022/04/21/russian-billionaire-alekperov-resigns-as-lukoil-ceo-amid-sanctions-over-ukraine/
57	Lukoil is listed as a client of Dr2 Consultants in its 2012 entry https://lobbyfacts.eu/representative/07ff8309e46c49ea880510a9f2518c14/dr2-consultants , of Fleishman Hillard in its 2016 entry https://lobbyfacts.eu/representative/9fcd8aa5ed924ac899657be9f5faab1e/fleishman-hillard , and of Access2Europe (A2E) in its 2016 entry https://lobbyfacts.eu/representative/6e2745e86f0b454a9d36971a0378cefa/access2europe

58	Transparency Register, Lukoil, <i>ibid.</i>
59	EUObserver <i>ibid.</i> ; FuelsEurope, Members, https://www.fuelseurope.eu/about-us/members/
60	Transparency Register, FuelsEurope, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=26207914726-42 , as of 18/04/22
61	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
62	FuelsEurope feedback on Sustainable finance – EU classification system for green investments - Roadmap, 20/04/20, Fuels Europe’s response can be found on page 27 of the feedback received https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Sustainable-finance-EU-classification-system-for-green-investments/feedback_en?p_id=7646923
63	BusinessEurope, ASG Group, https://www.bussinesseurope.eu/about-us/asgroup-our-partner-companies ; EUObserver, <i>ibid.</i>
64	Transparency Register, BusinessEurope, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=3978240953-79 as of 18/04/22. NB. EC meetings since 01/12/2014.
65	European Commission, Platform on Sustainable Finance, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance_en#who
66	For more on the troubling history of Rosatom as a business partner – in terms of finance, performance and significant safety concerns – see Greenpeace’s 2014 report, Rosatom Risks - Exposing the Troubled History of Russia's State Nuclear Corporation, available at https://www.academia.edu/20819181/Rosatom_Risks_-_Exposing_the_Troubled_History_of_Russias_State_Nuclear_Corporation
67	Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine: Le nucléaire peut-il garantir l'indépendance énergétique française? March 2022, https://www.greenpeace.fr/espace-presse/decryptage-lindustrie-nucleaire-francaise-une-alliee-du-regime-de-v-poutine/
68	The Conversation, Russia’s energy clout doesn’t just come from oil and gas – it’s also a key nuclear supplier, 18/03/22, https://theconversation.com/russias-energy-clout-doesnt-just-come-from-oil-and-gas-its-also-a-key-nuclear-supplier-179444 ; According to Rosatom, the Russian state nuclear firm is constructing 34 new reactors in foreign countries, in addition to seven new power units under construction in Russia (Source: https://rosatom-easteurope.com/en/investors/projects)
69	Névine Schepers, Russia's nuclear energy exports: status, prospects and implications, Non-Proliferation and Disarmament Papers No. 61, February 2019, https://www.sipri.org/publications/2019/eu-non-proliferation-and-disarmament-papers/russias-nuclear-energy-exports-status-prospects-and-implications
70	Bellona, Legislation grants Rosatom control of the Russian Arctic, 19/12/18, https://bellona.org/news/nuclear-issues/2018-12-legislation-grants-rosatom-control-of-the-russian-arctic
71	Defuel Russia’s War Machine (Urgewald and Ecodefense), Rosatom – Putin’s Nuclear Boogeyman, March 2022, https://defuel-russias-war.org/rosatom-nuclear-boogeyman/
72	See, for example, World Nuclear Industry Status Report (WNISR) 2021, https://www.worldnuclearreport.org/-/World-Nuclear-Industry-Status-Report-2021.html , and 2020 https://www.worldnuclearreport.org/-/World-Nuclear-Industry-Status-Report-2020.html NB. Illustrations of this kind of loan include the €10 billion Russian loan to Hungary for the Paks II nuclear plant (WNISR 2021).
73	OECD, Radioactive chemicals statistics, https://oec.world/en/profile/hs92/radioactive-chemicals
74	Euratom Supply Agency, Annual Report 2020, http://euratom-supply.ec.europa.eu/system/files/2021-10/MJAA21001ENN_002.pdf
75	European Commission, European Energy Security Strategy, COM/2014/0330 final, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52014DC0330
76	Euratom Supply Agency, Annual Report 2020, <i>ibid.</i>

77	Defuel Russia's War Machine, <i>ibid.</i>
78	Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine, <i>ibid.</i>
79	Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine, <i>ibid.</i>
80	International Atomic Energy Agency (IAEA), The Database on Nuclear Power Reactors, https://pris.iaea.org/pris , as of 01/04/22
81	Jan Haverkamp, The looming dependency on Rosatom in the EU, March 2019, written in commission for The Greens/EFA in The European Parliament, www.laka.org/docu/catalogue/publication/2.34.6.50/03_nuclear-energy-the-looming-dependency-on-rosat
82	For example, Paks II is estimated to cost €12billion (Source: https://www.worldnuclearreport.org/IMG/pdf/wnisr2021-lr.pdf); the final costs of Finland's Olkiluoto nuclear plant are estimated at €11 billion (Source: https://www.euractiv.com/section/all/short_news/the-never-ending-saga-of-finlands-olkiluoto-nuclear-plant/)
83	Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine, <i>ibid.</i>
84	Defuel Russia's War Machine (Urgewald and Ecodefense), Rosatom - Putin's Nuclear Boogeyman, March 2022, https://defuel-russias-war.org/rosatom-nuclear-boogeyman/ ; Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine, <i>ibid.</i>
85	Defuel Russia's War Machine, <i>ibid.</i>
86	Rosatom, Areas of cooperation, https://rosatom-europe.com/en/rosatom-in-country/areas-of-cooperation/
87	Rosatom, https://rosatom.ru/en/press-centre/news/rasu-jsc-concluded-a-memorandum-of-understanding-with-assystem-company-in-the-field-of-design-and-im/
88	Fennovoima, Fennovoima has terminated the contract for the delivery of the Hanhikivi 1 nuclear power plant with Rosatom, 02/05/22, https://www.fennovoima.fi/en/press-releases/fennovoima-has-terminated-contract-delivery-hanhikivi-1-nuclear-power-plant-rosatom
89	Defuel Russia's War Machine, <i>ibid.</i>
90	Veli-Pekka Tynkkynen (2019), The Energy of Russia: Hydrocarbon Culture and Climate Change, https://www.elgaronline.com/view/9781788978590/08_chapter4.xhtml Chapter 4: Energy as international power: the case of Russian-Finnish energy trade; Pami Aalto, Heino Nyyssönen, Matti Kojo & Pallavi Pal (2017), Russian nuclear energy diplomacy in Finland and Hungary, <i>Eurasian Geography and Economics</i> , 58:4, 386-417, https://www.tandfonline.com/doi/full/10.1080/15387216.2017.1396905
91	Balkan Green Energy News, Hungary, Russia to speed up construction of Paks II nuclear power plant, 04/06/21, https://balkangreenenergynews.com/hungary-russia-to-speed-up-construction-of-paks-ii-nuclear-power-plant/ ; WNN, Rusatom Service, MVM Group create European Power Services JV, 10/07/20, https://world-nuclear-news.org/Articles/Rusatom-Service-MVM-Group-create-European-Power-S
92	Rosatom, NUKEM Technologies GmbH, https://www.rosatom.ru/en/rosatom-group/back-end/nukem-technologies-gmbh/
93	Defuel Russia's War Machine, <i>ibid.</i> ; see also agreement signed in September 2019 for delivery of 12,000 tons of depleted uranium from URENCO Gronau to Russia: "Ihr Schreiben vom 15.08.2019 „Urananreicherungsanlage Gronau: Sofort stilllegen!“, 12/09/19, https://greenpeace.ru/wp-content/uploads/2019/10/Wirtschaftsministerium-NRW-an-GAL-Gronau-12.09.2019-UAA-Gronau.pdf
94	Vattenfall, Vattenfall secures new nuclear fuel supply, 14/12/16, https://group.vattenfall.com/press-and-media/pressreleases/2016/vattenfall-secures-new-nuclear-fuel-supply . NB. Vattenfall announced it was stopping deliveries of Russian nuclear fuel on 24/02/22 - see https://group.vattenfall.com/press-and-media/newsroom/2022/vattenfall-stops-deliveries-of-russian-nuclear-fuel
95	Rosatom, TVEL to introduce new fuel at Dukovany NPP in the Czech Republic, 29/07/19, https://rosatom.ru/en/press-centre/news/tvel-to-introduce-new-fuel-at-dukovany-npp-in-the-czech-republic/
96	Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine, <i>ibid.</i>
97	The Conversation, <i>ibid.</i>
98	Euratom Supply Agency, Annual Report 2020, <i>ibid.</i> ; Greenpeace France, Le double jeu dangereux de l'industrie nucléaire française, 10/03/22, www.greenpeace.fr/le-double-jeu-dangereux-de-lindustrie-nucleaire-francaise

99	Euratom Supply Agency, Annual Report 2020, <i>ibid.</i>
100	RIAC, The Role of Nuclear Energy for the Achievement of the EU's and Russia's Climate Targets, 04/03/22, https://russiancouncil.ru/en/analytics-and-comments/columns/climate-change-and-world-politics/the-role-of-nuclear-energy-for-the-achievement-of-the-eu-s-and-russia-s-climate-targets/ ; RIAC, Co-Founders, https://russiancouncil.ru/en/about/founders/
101	Greenpeace International, 6 reasons why nuclear energy is not the way to a green and peaceful world, 18/03/22, https://www.greenpeace.org/international/story/52758/reasons-why-nuclear-energy-not-way-green-and-peaceful-world/
102	Greenpeace International, Europe's radioactive secret how EDF and European nuclear utilities are dumping nuclear waste in the Russian Federation, November 2005, https://www.sortirdunucleaire.org/IMG/pdf/greenpeace-2005-11-18-europe_s_radioactive_secret-how_edf_and_european_nuclear_utilities_are_dumping_nuclear_waste_in_the_russian_federation.pdf
103	High North News, Russia Has Once Again Become the Solution to Germany's Nuclear Problem, 21/01/20, www.highnorthnews.com/en/russia-has-once-again-become-solution-germanys-nuclear-problem
104	Greenpeace European Unit, Exposed: French nuclear companies dumping radioactive waste in Siberia, 12/10/2021, https://www.greenpeace.org/eu-unit/issues/climate-energy/45879/french-nuclear-companies-exposed-dumping-radioactive-waste-siberia/
105	BBC News, Nuclear shipment leaves Germany for Russia, 24/06/20, https://www.bbc.com/news/world-europe-53156266
106	Thomas B. Cochran, Harold A. Feiveson, Walt Patterson, Gennadi Pshakin, M.V. Ramana, Mycle Schneider, Tatsujiro Suzuki, Frank von Hippel, Research Report 8 - "Fast Breeder Reactor Programs: History and Status", International Panel on Fissile Materials, February 2010, http://fissilematerials.org/library/rr08.pdf
107	Eurostat, Nuclear Energy Statistics, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Nuclear_energy_statistics
108	Euractiv, Europe nuclear plants 'need €500bn investment by 2050': European Commissioner, 10/01/22, www.euractiv.com/section/energy/news/europe-nuclear-plants-need-e500bn-investment-by-2050-eu-commissioner
109	Table 9 in Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i> Table 1 above shows the Rosatom links of EDF, Vattenfall, Orano and ČEZ; FORATOM's links are discussed in the main text of part 3; Commissariat à l'énergie atomique et aux énergies alternatives (CEA) is a French government agency with ties to Rosatom (see e.g. https://www.cea.fr/english/Pages/News/The-Chairperson-of-the-CEA-accompanied-President-Macron-on-his-visit-to-Russia-(May-24-25)-.aspx and https://rosatom.ru/en/press-centre/news/rosatom-cea-and-edf-join-r-d-efforts-to-demonstrate-recyclability-of-spent-mox-fuel/); Groupement des Industriels français du nucléaire (Gifen)'s members include companies with links to Rosatom, including EDF, Framatome and Orano (Transparency Register, Gifen, <i>ibid.</i>); Foro de la Industria Nuclear Española is linked to Rosatom via Tecnatom, Foro Nuclear's partner company, which signed an MoU with Rosatom subsidiary JSC RASU (see https://www.foronuclear.org/actualidad/noticias/tecnatom-y-rosatom-trabajaran-conjuntamente-en-determinados-proyectos-nucleares/); Sustainable Nuclear Energy Technology Platform (SNETP)'s governance includes organisations with links with Rosatom, inc. EDF, Framatome, FORATOM, Paks, etc (see https://snetp.eu/governance/).
110	Transparency Register, Private Institution of Atomic Energy Power Corporation "Rosatom International Network" (RAIN), https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=458218730949-73 , as of 19/04/22
111	Rosatom France states in its 2016 entry that it hired lobby consultants Sass Consulting; it is also listed as a client of Acceleration Management Solutions in 2020. Source: Lobbyfacts, Rosatom France, https://lobbyfacts.eu/representative/61c07c8ef04f44c3841aa6e1b225086e/rosatom-france ; JSC Atomenergoprom, https://lobbyfacts.eu/representative/feb27906006a4e3c94326e1b281c163e/jsc-atomenergoprom ; AtomEnergopromSbyt (AEPS), https://lobbyfacts.eu/representative/f04ff346328f4f15948b32bc8f28bc43/atomenergopromsbyt ; Acceleration Management Solutions S.A.M. (AMS S.A.M.), https://lobbyfacts.eu/representative/8f8fb5ea5cf34e0baa02082db23580f3/acceleration-management-solutions-s-a-m
112	Transparency Register, Internationaler Wirtschaftssenat, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=493255228378-56 , as of 20/04/22
113	World Nuclear Association, Governance and Leadership, https://world-nuclear.org/our-association/who-we-are/governance-and-leadership.aspx , as of 19/04/22

114	Transparency Register, World Nuclear Association, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=382541932700-21 , as of 26/04/22, the WNA entry stated "Intergroups and unofficial groupings (European Parliament) : Unofficial groupings: European Nuclear Energy Forum"; however, as of 09/05/22, it no longer shows up on the TR entry, but can still be seen on lobbyfacts at https://lobbyfacts.eu/representative/5eaccfce762a4e0ab0bbe4d58c50b955/world-nuclear-association ; European Commission, European Nuclear Energy Forum (ENEF), https://energy.ec.europa.eu/topics/nuclear-energy/nuclear-safety/european-nuclear-energy-forum-enef_en
115	World Nuclear Association feedback on Sustainable finance – EU classification system for green investments - Roadmap, WNA's 27/04/20, WNA's response can be found on page 8 of the feedback received https://world-nuclear.org/our-association/publications/public-consultations/submission-to-the-european-commission-%80%99s-delegated.aspx
116	World Nuclear Association feedback on Sustainable finance – EU classification system for green investments - Roadmap, <i>ibid.</i> WNA'
117	The European Commission's 2018 'A Clean Planet for all' vision paper says that "By 2050, more than 80% of electricity will be coming from renewable energy sources (increasingly located off-shore). Together with a nuclear power share of ca. 15%, this will be the backbone of a carbon-free European power system." The grammar is important here: note the "Oxford comma" after "15%", which means that the "this" after that comma refers to the more than 80% renewables as the backbone. It acknowledges merely that if there is 15% nuclear in the mix, this also will be carbon-free, but does not include it in the backbone. (Source: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0773&from=EN). Nuclear lobby group FORATOM was among the first to put a spin on this, turning nuclear into the backbone (Source: https://www.FORATOM.org/press-release/eu-confirms-nuclear-as-backbone-of-2050-carbon-free-europe/)
118	Rosatom, EU Taxonomy Lacks Nuclear - Rosatom Newsletter #241May 2021, https://rosatomnewsletter.com/2021/05/31/eu-taxonomy-lacks-nuclear/
119	Greenpeace EU Unit, Nuclear industry ties call EU research body's impartiality into question, 30/03/2021, https://www.greenpeace.org/eu-unit/issues/climate-energy/45537/nuclear-industry-ties-call-eu-research-bodys-impartiality-into-question/ , and full briefing at: https://www.greenpeace.org/static/planet4-eu-unit-stateless/2021/03/5a375b88-jrc-industrie-nucleaire-briefing-final-29032021.pdf
120	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
121	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
122	Voices of Nuclear, 46 environmental NGOs request nuclear energy's fair recognition in the European taxonomy, https://www.voicesofnuclear.org/46-environmental-ngos-request-nuclear-energy-fair-recognition-in-the-european-taxonomy/ ; Ares 2021 2166028, https://www.asktheeu.org/en/request/9447/response/32386/attach/12/Ares%202021%202166028%2046%20NGOs%20nuclear%20energy%20as%20an%20important%20part%20of%20the%20EU%20Taxonomy%20Redacted.pdf?cookie_pass_though=1 ; Voices of Nuclear, Association, https://www.voicesofnuclear.org/association/
123	Voices of Nuclear, Association, <i>ibid.</i>
124	It should be noted that 'Les Voix du Nucléaire' joined the lobby register on 18/11/2021 (and is currently registered, as of 26/04/22), but that lobbyfacts shows it was also previously registered in 2020 under its English name, 'Voices of Nuclear'- see https://lobbyfacts.eu/representative/47e5feb503964289b1617c2dbe531821/voices-of-nuclear
125	Transparency Register, Les Voix du Nucléaire, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=069633344719-02 , as of 26/04/22
126	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i> ; SFEN, Nos partenaires dans le monde, https://www.sfen.org/qui-sommes-nous/partenaires/ ; Rosatom, Public Council, https://www.rosatom.ru/en/sustainability/public-council/
127	Rosatom's Transparency Register entry as RAIN does not list any contributions to public consultations (though the register does note that these are only displayed if the entity indicated its Transparency Register ID number in its consultation contribution). In addition, we were unable to identify a response from Rosatom in the 413 responses to the Commission's Spring 2020 sustainable finance roadmap consultation – though it should be noted that some contributions are anonymous [See Sustainable finance – EU classification system for green investments – Roadmap - 23 March 2020 - 27 April 2020, at https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Sustainable-finance-EU-classification-system-for-green-investments/feedback_en?p_id=7646923] However, looking through the 46591 responses (1627 unique) to the Autumn 2020 consultation on the draft delegated regulation has been beyond the scope of this investigation [See Sustainable finance – EU classification system for green investments – Draft delegated regulation – 20 November 2020 - 18 December 2020, at https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Sustainable-finance-EU-classification-system-for-green-investments/feedback_en?p_id=16015203].

128	Hanhikivi 1, About the Project, https://www.hanhikivi1.fi/en/about-the-project
129	Hanhikivi 1, Fennovoima, https://www.hanhikivi1.fi/en/fennovoima-1 ; SRV, Fortum and Outokumpu reaffirm domestic ownership of Fennovoima, 05/08/15, https://www.hanhikivi1.fi/en/press-releases/srv-fortum-and-outokumpu-reaffirm-domestic-ownership-fennovoima . See also Fortum, Hanhikivi 1, https://www.fortum.com/products-and-services/power-plant-services/nuclear-services/newbuild/hanhikivi-1
130	Veli-Pekka Tynkkynen (2019), <i>ibid.</i> ; Pami Aalto, Heino Nyyssönen, Matti Kojo & Pallavi Pal (2017), <i>ibid.</i>
131	Veli-Pekka Tynkkynen (2019), <i>ibid.</i> ; Pami Aalto, Heino Nyyssönen, Matti Kojo & Pallavi Pal (2017), <i>ibid.</i>
132	The Guardian, Finland gives go-ahead to joint nuclear venture with Russia's Rosatom, 05/12/14, https://www.theguardian.com/world/2014/dec/05/finland-nuclear-project-russia-rosatom-reactor
133	Fennovoima hired Sass Consulting in 2020. Transparency Register, Fennovoima Oy, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=51375423794-46 , as of 05/05/22
134	Seura, Näin Venäjä vaikutti vuoden 2015 Fennovoima-omistuskohussa Suomeen – Lobbasi poliitikkoja ja yritti ohjailia mediaa sivuraiteille, 08/06/21, https://seura.fi/asiat/tutkivat/nain-venaja-vaikutti
135	Reuters, Rosatom subsidiary will proceed with Finnish nuclear project, 11/04/22, https://www.reuters.com/business/energy/rosatom-subsiidiary-will-proceed-with-finnish-nuclear-project-2022-04-11/
136	Fennovoima, Fennovoima has terminated the contract for the delivery of the Hanhikivi 1 nuclear power plant with Rosatom, https://www.fennovoima.fi/en/press-releases/fennovoima-has-terminated-contract-delivery-hanhikivi-1-nuclear-power-plant-rosatom
137	IntegrityWatch, MEP Meetings, https://www.integritywatch.eu/ . Fennovoima meetings with Petri Sarvamaa (EPP, Finland) 27-05-2021 on 'Nuclear energy'; Mauri Pekkarinen (RE, Finland), 10-05-2021, 'Discussion on nuclear power'; Nils Torvalds (RE, Finland), 05-05-2021, 'EU taxonomy'.
138	Sara Skyttedal on Twitter, 08/07/21, https://twitter.com/skyttedal/status/1413102118005792772
139	Fennovoima feedback on Sustainable finance – EU classification system for green investments - Roadmap, 20/04/20, Fennovoima's response can be found on page 16 of the feedback received https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Sustainable-finance-EU-classification-for-green-investments/feedback_en?p_id=7646923
140	Although Fennovoima has access to the documentation of the Onkalo nuclear waste depository in Finland, which is planned to go into operation in the coming decade, it is not allowed to deposit its high-level nuclear waste in this depository, but will have to create its own. https://www.world-nuclear-news.org/WR-Fennovoima-plans-own-repository-for-used-fuel-2206165.html
141	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
142	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
143	Transparency Register, Fennovoima Oy, <i>ibid.</i>
144	WNN, Europe needs nuclear energy, says new FORATOM president, 17/04/20, https://www.world-nuclear-news.org/Articles/Europe-needs-nuclear-energy-says-new-FORATOM-pres?feed=feed ; FORATOM, FORATOM selects new President Esa Hyvärinen, 10/01/20, https://www.FORATOM.org/press-release/FORATOM-selects-new-president-esa-hyvarinen/ ; FORATOM welcomes new President, Jean-Michel Quilichini, 10/01/22, https://www.FORATOM.org/press-release/FORATOM-welcomes-new-president-jean-michel-quilichini/
145	For example, FORATOM has had four top-level Commission meetings specifically on the Taxonomy since June 2020. Source: Transparency Register, European Atomic Forum (FORATOM), https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=42433582-82 , as of 03/05/22.
146	FORATOM feedback on Sustainable finance – EU classification system for green investments - Roadmap, 08/04/20, FORATOM's response can be found on page 41 of the feedback received https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Sustainable-finance-EU-classification-system-for-green-investments/feedback_en?p_id=7646923
147	Nucnet, Taxonomy / FORATOM Calls For Nuclear To Be Put On 'Equal Footing' With Renewables, 11/01/22, https://www.nucnet.org/news/FORATOM-calls-for-nuclear-to-be-put-on-equal-footing-with-renewables-1-2-2022

148	IntegrityWatch, MEP Meetings, https://www.integritywatch.eu/ , FORATOM meetings with Tomas Tobé (EPP, Sweden) 30-06-2021 'Taxonomy'; Jessica Stegrud (ECR, Sweden), 16-06-2021, 'Energy Policy'; Alex Agius Saliba (S&D, Malta), 27-04-2021, 'Resilience of Critical Entities CER Directive'; Jessica Stegrud (ECR, Sweden), 10-06-2020, 'Energy Policy'; Gilles Boyer (RE, France), 30-01-2020, 'Taxonomy, EU Green Deal'; Karin Karlsbro (RE, Sweden), 07-11-2019, 'Introduction'; Jörgen Warborn (EPP, Sweden), 05-11-2019, 'Energy Policy'; Christophe Grudler (RE, France), 10-09-2019, 'Politique industrielle européenne, secteur de l'énergie'.
149	IEN Europe, Nuclear MEP Club Launched in the European Parliament, 26/11/21, https://www.ien.eu/article/nuclear-mep-club-launched-in-the-european-parliament/
150	World Nuclear Exhibition, WNE 2021 Sponsors, https://www.world-nuclear-exhibition.com/en-gb.html
151	European Commission, Speech by Commissioner Simson at the World Nuclear Exhibition, 30 November 2021, https://ec.europa.eu/commission/commissioners/2019-2024/simson/announcements/speech-commissioner-simson-world-nuclear-exhibition_en
152	For more about the baseload myth, see e.g. The Ecologist, Dispelling the nuclear 'baseload' myth: nothing renewables can't do better!, 10 March 2016, https://theecologist.org/2016/mar/10/dispelling-nuclear-baseload-myth-nothing-renewables-cant-do-better
153	European Commission, Speech by Commissioner Simson at the World Nuclear Exhibition, <i>ibid.</i> Emphasis added.
154	European Commission, Commissioner Simson attends World Nuclear Exhibition in Paris, 30/11/21, https://ec.europa.eu/info/news/commissioner-simson-attends-world-nuclear-exhibition-paris-2021-nov-30_en
155	Rosatom, ROSATOM to attend at the World Nuclear Exhibition, 29/11/21, https://rosatom.ru/en/press-centre/news/rosatom-to-attend-at-the-world-nuclear-exhibition/
156	WNE Paris, WNE 2021 - Sponsor's Tribune ROSATOM, https://www.youtube.com/watch?v=ICB0Y2ut4Jk From 8:46 to 9:15 - based on the translation from Russian to English provided by WNE.
157	WNE Paris, WNE 2021 - Sponsor's Tribune ROSATOM, <i>ibid.</i> From 20:12 to 20:57
158	Kadri Simson on Twitter, 12/04/22, https://twitter.com/KadriSimson/status/1513911487609327621
159	Greenpeace International, 6 reasons why nuclear energy is not the way to a green and peaceful world, <i>ibid.</i>
160	Greenpeace France, L'industrie Nucléaire Française, Une Alliée Du Régime De V. Poutine, <i>ibid.</i>
161	Reclaim Finance, Out with Science, In with Lobbyists, <i>ibid.</i>
162	Rosatom, Areas of Cooperation, https://rosatom-europe.com/fr/rosatom-in-country/areas-of-cooperation/
163	Rosatom, ROSATOM takes part in World Nuclear Exhibition, 06/12/21, https://www.rosatom.ru/en/press-centre/news/rosatom-takes-part-in-world-nuclear-exhibition/ ; ROSATOM and EDF Group join forces to develop green hydrogen strategy, 26/04/21, https://rosatom.ru/en/press-centre/news/rosatom-and-edf-group-join-forces-to-develop-green-hydrogen/
164	EDF feedback on Sustainable finance - EU classification system for green investments - Roadmap, 21/04/20, EDF's response can be found on page 22 of the feedback received https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Sustainable-finance-EU-classification-system-for-green-investments/feedback_en?p_id=7646923
165	IntegrityWatch, MEP Meetings, https://www.integritywatch.eu/ EDF meetings as of 20/04/22; Transparency register, EDF, https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=39966101835-69 , as of 20/04/22
166	Defuel Russia's War Machine, <i>ibid.</i>
167	Rosatom, EU Taxonomy Lacks Nuclear, <i>ibid.</i> ; Ares 2021 2085773 Prime Ministers CZ HU PL RO SK SI and President FR role of nuclear power in the EU climate and energy policy with annexes Redacted.pdf, https://www.asktheeu.org/en/request/9447/response/32386/attach/18/Ares%202021%202085773%20Prime%20Ministers%20CZ%20HU%20PL%20RO%20SK%20SI%20and%20President%20FR%20role%20of%20nuclear%20power%20in%20the%20EU%20climate%20and%20energy%20policy%20with%20annexes%20Redacted.pdf?cookie_passthrough=1

168	<p>Politico, Russia's nuclear attack on Europe, 01/02/17, https://www.politico.eu/article/russias-nuclear-attack-on-europe/; WNN, Rosatom Service, MVM Group create European Power Services JV, 10//07/20, https://world-nuclear-news.org/Articles/Rosatom-Service-MVM-Group-create-European-Power-S; KHI, Rosatom prepares for Hungarian nuclear plant expansion, 23/11/20, https://www.khl.com/news/rosatom-prepares-for-hungarian-nuclear-plant-expansion/1147161.article</p>
169	<p>Euractiv, Czech secret services warn against involvement of Russia in nuclear, 26/03/21, https://www.euractiv.com/section/politics/short_news/czech-secret-services-warn-against-involvement-of-russia-in-nuclear-tender/</p>
170	<p>It should also be noted that another Russian linked nuclear firm is active in Slovakia and the Czech Republic – Czech firm Škoda JS, which is owned by the Russian Gazprombank and managed by the Russian heavy industry giant OMZ. (Source: https://mind.ua/en/openmind/20233080-and352koda-js-will-be-scrapped)</p>
171	<p>Nuclear Engineering International, Russia and Slovakia agree to continue co-operation, 11/06/19, https://www.neimagazine.com/news/newsrussia-and-slovakia-agree-to-continue-co-operation-7254850; WNN, Contracts signed for completion of Mochovce, 16/06/09, https://www.world-nuclear-news.org/NN-Contracts_signed_for_completion_of_Mochovce-1606094.html</p>
172	<p>Euractiv, Nuclear project with Russian reactors shakes Bulgarian politics, 21/02/22, https://www.euractiv.com/section/politics/short_news/nuclear-project-with-russian-reactors-shakes-bulgarian-politics/</p>
173	<p>Rosatom, Recognition in Europe - Rosatom Newsletter #250February 2022, https://rosatomnewsletter.com/2022/02/24/recognition-in-europe/</p>