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Who finances the plastic flood?

The money behind INEOS and Borealis

Amadeo Ghiotto

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#breakfreefromplastic

ClientEarth 



Acknowledgements

We are reaching a tipping point on how much plastic waste our planet can be burdened with. Plastic producers such as INEOS and Borealis are flooding us with plastic that we don't really need, and the planet can't really handle anymore. That's why [FairFin](#) wanted to take a closer look at the money making this all possible. However, this research on the financiers of plastic producers INEOS and Borealis wouldn't have been possible without a couple of people.

This study was commissioned by [ClientEarth](#), an international environmental NGO that uses the law to protect our planet. I want to thank them for their expertise and trust. Secondly I want to thank the experts of the [Break Free From Plastic movement](#), whose combined knowledge on the impact of plastics has been instrumental in our research. Thirdly I want to thank the chemical expertise of Jean-Luc Wietor of the [EEB](#) who helped us debunk the green claims of these petrochemical giants. Finally, I want to express our gratitude to my FairFin colleagues for taking the time to critically analyse the study and provide helpful feedback, with a special thanks to Frank Vanaerschot and Katrien Doms.

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Intro

Taking on plastic is, in certain ways, similar to taking on consumerism. It challenges us to acknowledge how drastically our way of life has transformed the globe in a single lifetime, and it raises the question: how do we put a stop to this? How do we stop being flooded with unnecessary plastics on a planet with limited resources?

In [the first chapter of this report](#) we will take a look at the impact of plastic on the world and its inhabitants throughout its entire value chain. The various stages of the plastics life cycle have largely been treated separately, but it's important to highlight the entire plastic process from A to Z. Focussing on the plastic crisis solely as a waste problem serves the interests of those who want to avoid difficult discussions about the unsustainable nature of the ever-enlarging plastic mountain.

In [the second chapter](#) we will review the economic risks associated with investments in plastic production. First of all, societies all around the world pay the high costs of the plastic crisis, in the shape of carbon emissions, environmental pollution, and health problems.

But even without taking into account the external costs of plastic on society, the economic prospects of plastic are far less rosy than the industry would like to project. A few important initiatives under the European Green Deal will have significant impact on the plastic industry, and leaders all across the globe are taking steps to combat the plastic catastrophe.

Stricter regulation on the subject is unavoidable. Furthermore, the general public is turning their back on plastic too, with surveys showing a shift in public opinion.

This declining demand for plastic, in combination with an already saturated plastic market in Europe, makes for a gigantic economic risk. New mega projects such as INEOS' Project One or Borealis' Kallo project will exacerbate this even further, leaving the petrochemical industry with [\\$200 billion dollars in overcapacity](#) in 2019 alone.

That's why [chapter three](#) takes a closer look at INEOS and Borealis and their financiers. These chemical giants are building two plastic projects in the Port of Antwerp, which are two of the biggest in Europe in the last 20 years. Using fossil fuels as feedstock, they will use enormous amounts of energy to turn these into building blocks for virgin plastics. Taking up a large amount of our limited carbon budget and energy resources, those projects are a lot less sustainable than INEOS and Borealis claim them to be.

In [the last chapter](#) we specifically look at banks active in Belgium financing INEOS and Borealis and their policies on plastic. After we published our October 2021 report "[The unbearable cost of single-use plastics](#)" we scheduled meetings with banks active in Belgium that have financial links to nine companies in the food industry, such as Coca-Cola, Ab Inbev, and Unilever. These companies are some of the biggest single-use plastics users in the world,

which make them vulnerable to the financial risks of single-use plastics.

In these meetings, we noticed a discrepancy between their stance on plastic pollution and their policies. They say they take plastic pollution and the pollution caused by plastic production very seriously, but this is not reflected in their policies.

Banks are risking their own climate objectives by granting plastic production safe harbour, by continuing to invest and lend to these outdated business models of fossil fuel virgin plastics. Considering both the planetary and economic risks associated with plastic production, financing plastic production is financing planetary decline.

This report in a nutshell

- ✖ Plastic is bad for people and the planet. Therefore, the plastic crisis must be tackled at the source, which means less plastic must be made.
- ✖ Yet banks in Belgium keep financing plastic production. Between 2016 and 2021 ING, Deutsche Bank, BNP Paribas, KBC, and Belfius invested nearly 3 billion euros in INEOS and Borealis.
- ✖ They invested in chemical giant INEOS which wants to set up a new plastic project in the port of Antwerp called Project One. In addition, they supported Borealis which is already building a new plastic plant in the port of Antwerp. These projects produce the building blocks of plastic and lock us into a future of decades of plastic production.
- ✖ Producing these building blocks is hugely polluting to the environment and the climate, contrary to what these chemical giants want us to believe.
- ✖ The production process relies on fossil fuels and emits a lot of CO₂, in a time where we need to move away from fossil fuels to stay below 1.5°C of global warming. These plastic projects also consume an enormous amount of energy, in a period of usurious prices and energy scarcity.
- ✖ In addition, there are major economic risks associated with investing in plastic production. There is already a global overproduction of plastic and upcoming legislation will restrict its use even more.
- ✖ PMV, the Flemish government's investment fund, has granted a guarantee of between 250 and 500 million euros to Project One. As a result, the Flemish taxpayer is taking a significant part of the risk of this project on its shoulders.
- ✖ INEOS already had to put half of Project One on hold last year. What was triumphantly announced a few years ago as the largest investment in European petrochemicals in the last 20 years threatens to cost the Flemish taxpayer dearly.
- ✖ With this report, FairFin wants to put pressure on banks to stop investing in companies that expand plastic production. We also ask the federal government to take their responsibility as a shareholder of BNP Paribas and owner of Belfius.

1. Impact of plastic production

There is no denying that plastic has a profound impact on our planet, nor is it a new finding. The scientific community has been doing research on the impact of plastic since World War II, and throughout the 1960s and 1970s, awareness of the issue grew. Fossil fuel and plastics companies have known [since the beginning](#) how far-reaching the impact of their products is. Yet they have consistently shifted the blame and responsibility to the consumers, all while fighting regulation that might affect their production.

A lot of the existing data on the impact of plastics does not take into account their full environmental footprint, but instead chooses to focus on one specific issue arising with plastics. While this is interesting in its own right, to fully grasp the entire impact of plastics, we will start by addressing the three major polluting sections of the plastic life cycle separately, and conclude by linking them together.

We will focus first on the extraction and refining of fossil fuels, the base ingredient of plastic. Then we will discuss the petrochemical industry that produces plastic, and finally, we will consider the impact of plastic as waste.

Petrochemicals as fossil fuel Plan B

The planetary emergency of the plastic crisis poses economic risks to the [\\$434.71 billion plastic market](#), but also to our general economic system. A business-as-usual scenario, where the plastic production industry plans on doubling its CO₂ emissions, is impossible to combine with the necessity to keep global warming under 1.5°C, as written in the Paris agreement.

At the moment, the big fossil fuel companies know that climate change is receiving a legislative answer, and that the public opinion is shifting. Trends of electrification of transport and a transition towards renewable energy is eating at the profits and future prospects of these multinationals. These last few years, they've poured billions of euros into new plastic plants towards vertical integration with the petrochemical industry, which seems to indicate that [plastic is their Plan B](#), as a way to sustain their profits when the response to climate change will reduce demand for fossil fuels. At the same time, existing plastic producers are expanding their production as well, in order to cater to expanding markets in the Global South.

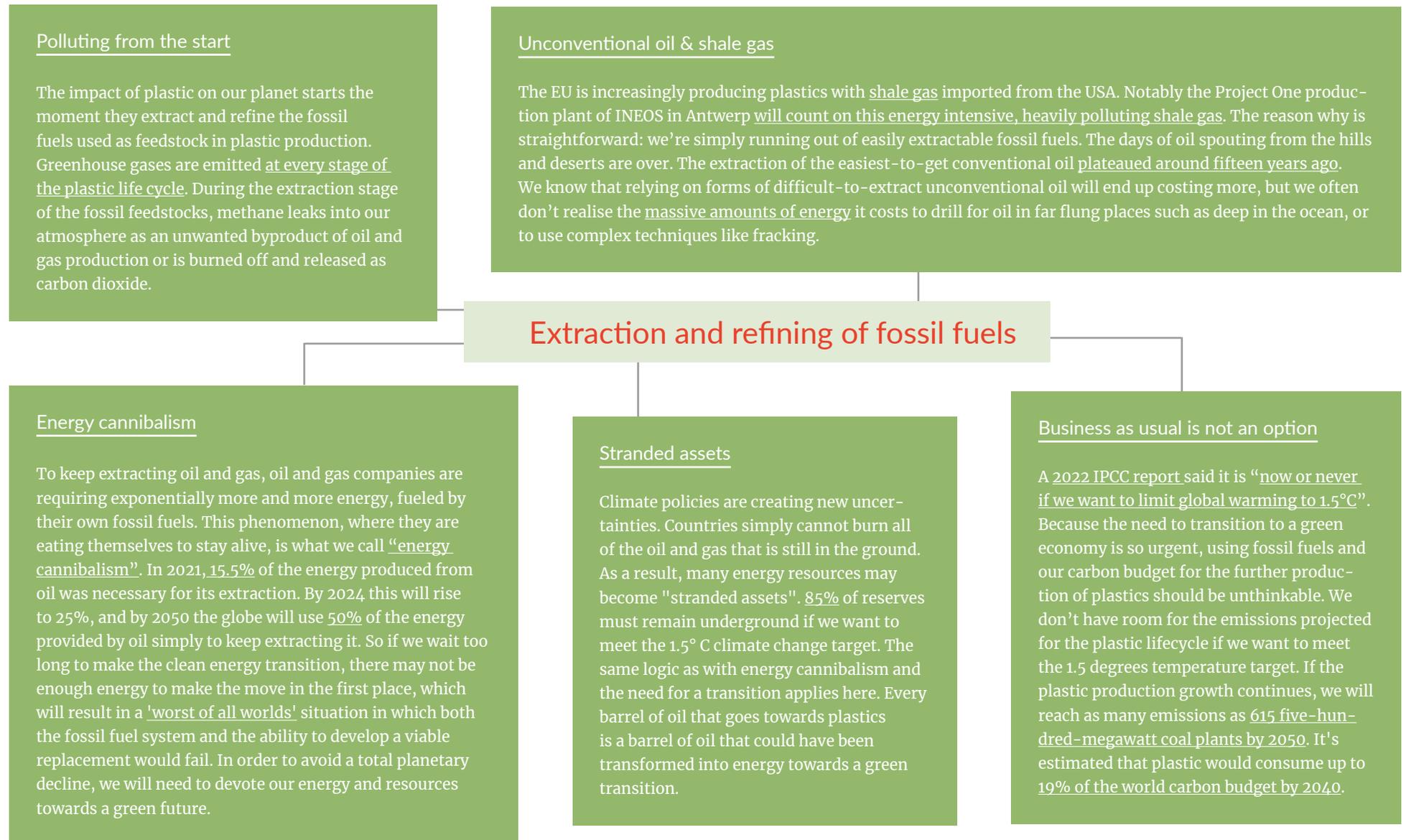
At the moment, plastics only account for [9% of the demand for fossil fuels](#), but the International Energy Agency projects plastics to account for almost [50% of the growth in oil demand by 2050](#). However, Carbon Tracker showed in their 2020 report "[The Future's Not in Plastics](#)" how the industry's bet on a strong demand for plastics will not happen due to

a regulatory response of governments. They calculated this loss to be \$400 billion worth of stranded petrochemical investments, putting investors at risk of catastrophic losses.

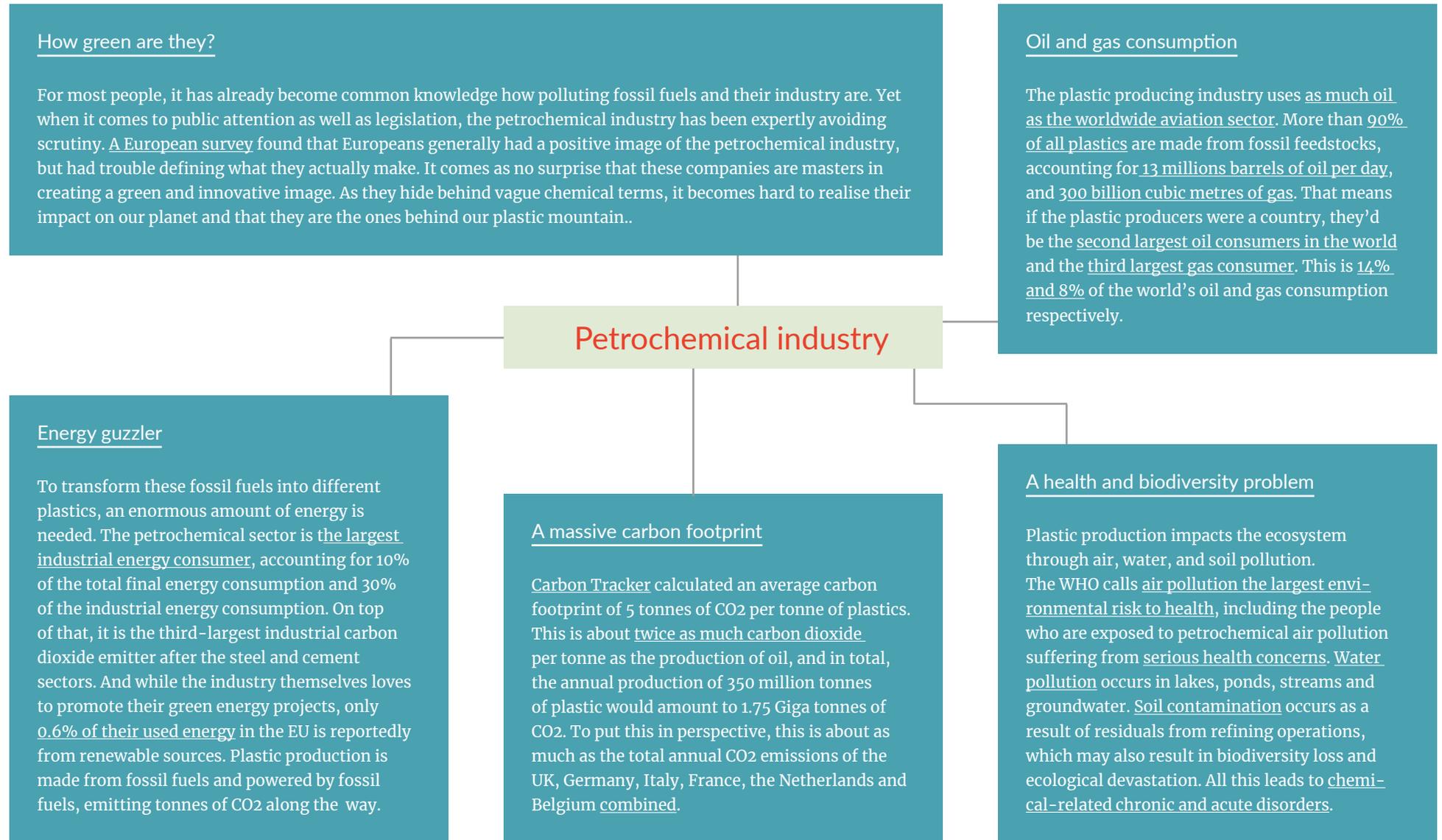
Adding to this, [research by CIEL](#) notes how the product chains of plastics and fossil fuels are intimately linked. Even little shifts in the price of oil or gas may have a big impact on the plastics business. As a result, a significant shift in fossil fuel markets as well as the eventual phase-out of fossil fuels as an energy source are expected to have an important impact on the plastics industry's long-term economic prospects.

Under a net zero transition, [half of the world's fossil fuel assets will be worthless by 2036](#), according to University of Cambridge researchers. This will leave fossil companies and investors with \$11-\$14 trillion in stranded assets. A Plastic Plan B might have a short term gain for the fossil fuel industry, but in the long term a phase-out of fossil fuels is unavoidable. With lower Energy Return On Investment, fossil fuels will be harder to extract and prices of fossil fuels will rise, and the plastics industry will feel that spike. A higher carbon price and new regulations on fossil fuels will affect the oversupplied plastics market.

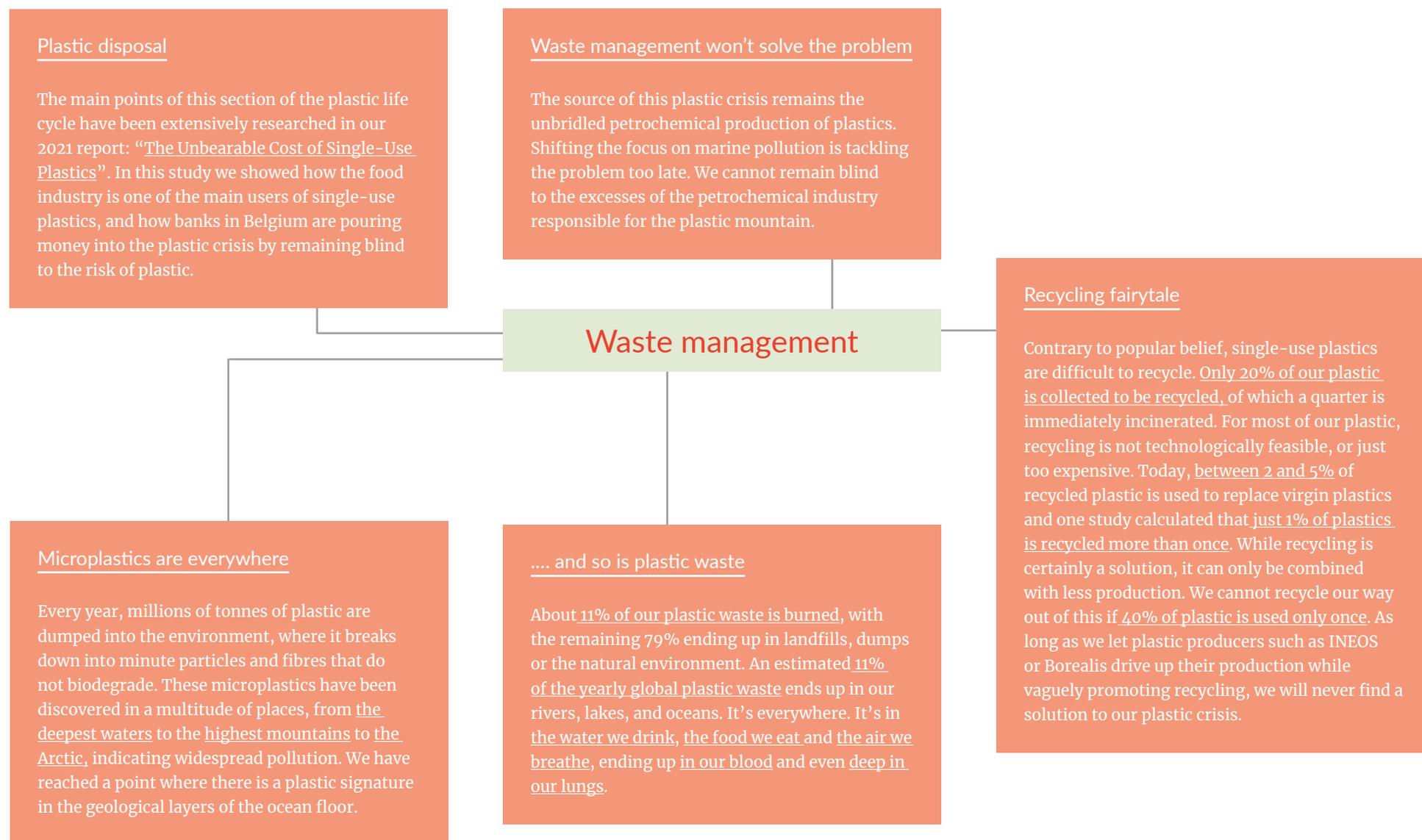
Plastics, a polluting straight line from beginning until the end



Plastics, a polluting straight line from beginning until the end



Plastics, a polluting straight line from beginning until the end





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The systemic risk to the planet

Today's science informs us that we only have one generation to make a significant change in our economic policies and our relationships with the environment. If we want to avert a big tipping point or "point of no return," we need to take action now. What this means is that the environmental, climate, and health effects of plastic are a threat to our entire system, making plastic a systemic risk to the planet. Yet banks and plastic producers are remaining blind to what that might mean for our ecosystem.

After that, large-scale changes in the earth's climate will very certainly be irreversible and beyond our capacity to avert. The [IPCC has cautioned](#) that the impacts of escalating climate change are already irreversible, and that the agreed-upon goals of reducing global warming by 1.5 or 2 degrees Celsius are quickly becoming unattainable. [A 2022 study published by the American Chemical Society](#) confirms that chemical pollution, which includes plastic, threatens the stability of our global ecosystems. We have crossed a "planetary boundary", and scientists note how the toxic effects of chemical pollution damage the biological and physical processes that underpin all life.

By 2050, [there will be more plastic than fish](#) in our oceans, and right now the total mass of plastics on the planet is already [twice the mass of all living mammals](#). While this is a truly daunting future prospect, we should broaden our perspective and take into account how the combination of different

risks from the plastic life cycle, from extraction to disposal, might affect entire systems. In other words, how will the millions of tonnes of plastic disrupt balanced ecosystems such as the ocean, which supplies about [50% of our oxygen](#) and is [the primary food source for 3 billion people](#).

There's something seriously wrong with the business model of plastic production, since it needs constant destruction of its output in order to survive

As we've seen, the impact of plastic during its entire life cycle is severe. And the problem is the plastic market itself. It does not seem to follow classic economic trends of supply and demand. Regarding single-use plastic, there is no real demand being answered by a supply. It's actually quite the opposite. The plastic industry is simple: by flooding the market with dirt cheap and lightweight plastics, the consumers are bombarded with their products, regardless of what they want. Knowing that each returnable bottle [replaces the sale of 20 non-returnable bottles](#) might help explain this logic.

There's something seriously wrong with the business model of plastic production, since it needs constant destruction of its output in order to survive. It needs a linear economy instead of a circular one. In a true circular economy there would be little use for INEOS' and Borealis' new plastic facilities in the Port of Antwerp. But since they are not the ones paying for the waste they produce, it's in their best interest to produce as much as possible and let the planet deal with it.

Our current plastic crisis is not caused by plastic ending up in the ocean. That's but an inevitable complication of the true cause of our plastic crisis, namely the fact that the focus of these companies is not necessarily fulfilling the demand of the people,

but creating a market for their supply. This in itself is unsustainable and a systemic risk to our planet, since we know that we are hitting the [limits of our growth](#). We would need [5 planet Earths](#) to sustain an American lifestyle, and our lavish plastic appetite is part of this planetary inequity.

So the most important question policy makers, consumers, and banks need to address is not just how to deal with plastic trash, but rather how to stop making so much plastic in the first place. Plastics manufacturing's massive worldwide expansion is the final gasp of a fossil fuel industry that has been pushed out of the energy sector and is seeking a new home. By giving it a safe harbour, governments and banks are jeopardising their own ambitious climate goals.





2. Economic risks: the market, the policy makers, and the public have turned against plastic

The recent [investments in ethylene and propylene production plants](#) have been spurred by the past decade's [shale gas boom in the United States](#) and [coal powered plastics in China](#). So while banks and policy makers made [commitments to the coal phase-out](#) for energy at COP26, they also continue to pour money into the growing production of coal powered plastics in China. Regarding the shale gas boom, FairFin has shown in its [2020 report](#) on the polluting shale gas industry that the debt of the shale gas industry is unsustainable, its production too polluting, and its future bleak.

Many new plastic producing factories have already been constructed, necessitating the identification or creation of new markets, new customers, and an ever-increasing flow of plastic packaging and garbage. This expansion might lock in a future of cheap plastic production for decades to come.

All this while [demand for plastics has already peaked in the OECD member states](#), which make up over half of the global plastic demand.

Carbon Tracker calculated that this left the petrochemical industry with \$200 billion dollars in overproduction in 2019 alone. And this will only rise with the new

investments coming online in 2025. Especially on the European market, the production is very competitive compared to the Chinese and American production. [The Boston Consultancy Group](#) notes that the European market has lost its growth in demand, needs expensive feedstocks imported from other continents and has high prices for energy to sustain its production.

While being wedged between the USA and the Middle East, who both have access to cheap fossil fuels and energy, the European plastic production does not have good prospects. Carbon Market Watch confirms this, and says that while in the short term demand might increase due to growth markets, the longer-term trends project a negative impact due to a combination of regulatory and public pressure. They note that the 2019 global increases in ethylene capacity were 60% higher than the rise in demand for ethylene and that this is an unsustainable trend which would continue in the coming years.

The costs of plastics to our society

We have discussed how plastic impacts our planet, but not the high economic costs that are caused by its impact and by air, water, soil and marine pollution. These are costs paid for by societies and governments around the world and not the polluters themselves.

The entire discussion on the economic viability of plastic production is always based on one major design flaw within the architecture of the plastic industry: the external costs of plastic are not accounted for. If one would account for the high external costs associated with plastic production, there are no scenarios anymore where it would be profitable.

It is hard to quantify this cost exactly, but there are a few calculations that have been made in the last few years. Carbon Tracker identified four aspects to be quantified, namely: carbon dioxide emissions, air pollution, collection costs, and ocean clean-up costs. They ended up with [\\$1000 per tonne of plastic](#), which is about as much as the average price for a tonne of virgin plastic. Meaning that the external costs of plastic to society are as much as the entire annual plastic market of \$350 billion. Actually accounting for this staggering amount of external costs would disrupt the plastic industry and its growth in a colossal way.

Costs relating to plastic pollution in ecosystems and the impact of microplastics, as well as indirect health costs associated with long term exposure to plastics, should also be taken into account. A group of UK marine scientists found the decline in marine ecosystem value due to plastic pollution to be up to \$2.5 trillion a year. WWF went a step further in 2021 and calculated that the total costs of plastic to society, the environment and the economy was [\\$3.7 trillion dollars](#) every year. If the external costs associated with plastics would be a country, it'd be the [5th largest economy](#) of the world. To put this in perspective: this yearly cost is about as much as the total [GDP of 150](#) of the 206 nations on earth.

Regulations on the plastic industry

Even without taking into account the external costs of plastic to society, the economic prospects of plastic are far less rosy than the industry would like to project. With demand declining and supply rising, this plastic bubble seems ready to pop. Even a business-as-usual growth trajectory seems highly unlikely. Leaders all around the world are taking action in the battle against the plastic crisis. A few key policies by the European Union will disrupt the plastic industry in a drastic way.

However, there is a dangerous paradox among the policies regarding plastic. While the IPCC urges that states still [are not doing enough to meet the 1.5° C threshold](#), these last few years the pressure and necessity to decrease the extraction of fossil fuels has surged, while at the same time more and more attention is paid to the plastic trash left behind in the oceans and ecosystems. But there is a [curious blind spot in the centre](#) of the plastic process, namely the petrochemical plastic production. New petrochemical projects are even applauded and encouraged by policy makers, such as the Mayor of Antwerp who was [“overcome by pride and humility”](#) after the announcement of Project One in the Port of Antwerp.

This is a dangerous gap in government policies and needs to be addressed. This lack of climate policy directly regarding the petrochemical industry is dangerous, and an economic risk. The industry can make optimistic growth prognoses, but will eventually be affected by climate policy on fossil fuels

and plastic waste. New announced investments such as Project One or Borealis' Kallo cracker make little sense when evaluated on the entire plastic value chain.

**If we want to succeed
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The most important tool the EU has in its battle against plastic is the EU Green Deal, where plastic has a role in the ambitions of the Circular Economy Action plan. [By 2030 all packaging in the EU needs to be reusable or recyclable](#). Knowing that packaging accounts for 40% of plastic demand, this will eat up a large portion of the plastic industry. Due to these recycling initiatives, the demand for polyethylene virgin plastics is estimated to [reduce by 26%](#) by 2031. As part of its green stimulus package, [a tax of €800 per tonne](#) of unrecycled plastic has been introduced in 2021. Added to this, the EU is quite clear on its rules regarding [sustainable finance taxonomy on plastic manufacturing](#): fossil fuel derived plastics are not sustainable and never will be under current EU taxonomy.

Back in 2018, the EU published its [long term strategy for 2050](#): it aims to be climate-neutral by 2050 and reduce net emissions by [45% of 1990 levels by 2030](#). If we want to succeed in our climate goals, we cannot allow a petrochemical expansion that will generate a flood of fossil fuel plastics for decades. The ambitious growth that the industry strives for is impossible under a net-zero strategy. As we will see later in this report, the promised technology, such as carbon capture, does not exist on a scale that would make net-zero possible.

The industry knows that the OECD market is saturated, so they're gambling on growth markets such as China, India, and other countries. But their

attempt to flood the growing markets with polluting single-use plastics will be to no avail. The countries that plastic producers are counting on in their growth prospects are the same ones suffering the most from our plastic crisis, and are taking action as well. In 2020, Chinese policy makers announced the [“strictest plastic ban”](#) in history, in a plan to phase out single-use plastics and to [boost recycling rates](#). Additionally, India wants to [eliminate all single-use plastic in the country by 2022](#) and the Philippines’ Parliament has [voted unanimously in 2021](#) to prohibit the production, import, and sale of many single-use food packaging products. Furthermore, most countries in the region have already implemented some form of (single-use) plastic ban.

We will need more than national plastic policies however. On a truly global issue such as the contemporary plastic crisis, we will require a global answer. At the United Nations Environmental Assembly 5.2 2022, voices for an international plastic treaty became louder. In what many have called a genuinely historic event, world leaders, environment ministers, and other representatives from 173 countries have [agreed to draft a legally binding treaty on plastics](#), with support from big polluters such as the [United States and the United Kingdom](#). Some of the biggest plastic users in the world such as Coca-Cola, PepsiCo, Unilever and Ikea have also voiced their support and have called UNEA 5.2 [the decisive moment to turn the tide on the global plastic](#)

[pollution crisis](#). Officials claim it provides negotiators a broad and powerful mandate to examine new rules aimed at reducing plastic pollution from its inception as a raw material to its design, usage, and safe disposal. Negotiation of enforceable global targets with monitoring mechanisms, establishment of national programs and financing for poorer nations are all part of the mandate.

At the moment, policy on plastic - when it exists - is mostly focused on the end product. At COP26 there was one big absentee, namely the plastic industry. There was some talk about marine pollution, but somehow the third largest emitter of greenhouse gases was able to slip under the radar and [nowhere to be found on the agenda](#). The same goes for the current policies of the EU, where plastic is seen as a waste management issue.

When taking a closer look at [the European Green Deal](#) we can see that plastic is only discussed in light of the circular economy action plan with the goal to reduce waste, promote recycling and reduce the use of virgin plastics. The petrochemical industry producing the plastics seems to escape the criticism and attention that the fossil fuel industry and plastic litter are receiving. This is blindly ignoring the climate impact of plastic during its production stages and allows them to expand their operations. Once completed, these new and enhanced facilities will be operational for decades. This will increase the petrochemical industry's present greenhouse gas

emissions, which are already the third highest of all businesses.

A growth in emissions due to plastic production will be incompatible with the Paris climate goals, with the COP26 net-zero goals and with the EU goal to [decrease greenhouse gas emissions by 55% by 2030](#). It's in the banks' interest to stay ahead of inevitable policies disrupting the plastic production industry. The same researchers who found that half of the world's fossil fuel assets will be worthless by 2036 under a net zero transition emphasise that [countries who free up investments towards renewables and decarbonise more quickly will be the ones to profit](#).

It is clear that the various stages of the plastics life cycle have largely been examined separately rather than comprehensively. More integrated perspectives on the politics of plastics across the full life cycle are needed, from manufacturing to consumption to waste and contamination. However, we can already confidently state that the current existing, planned and inevitable policies will disrupt the plastic market in such a way that blindly pouring money into plastic production is a clear, long term economic risk.

The public support for plastic is lost

Not only have policy makers woken up to the unfolding threat of the plastic crisis, but citizens are increasingly becoming aware of the limits of our plastic growth. While it is difficult to estimate the impact of the consumer's outlook, we can confidently say that the public perception on plastic and plastic waste is in decline. This can be attributed to multiple reasons.

First of all, the general attention towards environmental issues has increased among all political parties. The impact of human activity on our planet has become undeniable and requires a proper response. Secondly, in the slipstream of this general concern for our planetary health, plastic has received more attention. Daunting statistics or future prospects regarding plastic pollution often reach news headlines, alerting the public even further on the alarming pollution of plastics. Additionally, plastic litter surrounds us everywhere we go, which makes the crisis tangible.

The gap we identified regarding the lack of policy and attention towards the plastic producers is also noticeable in public support of the petrochemical industry. According to a [European survey](#), Europeans have a favourable perception of the petrochemical industry, but they can't quite define what it does. By hiding behind chemical lingo and focusing on innovation and job creation, companies such as INEOS and Borealis can evade public scrutiny of their massive CO₂ emissions. This is in contrast with the

negative perception people have of plastic and fossil fuels, which are both at the core of the petrochemical industry.

The result is that surveys and research done on the public perception of plastic confirm the growing attention of consumers on the plastic crisis. In a worldwide [Ipsos poll from 2021](#), 75% of people agree that single-use plastic should be banned as soon as possible. Which is up 4% from their [2019 poll](#). 65 000 people from 24 countries were questioned in [this 2019 survey](#), in which plastic was placed second on people's list of biggest environmental concerns. [A UK survey in 2019](#) found that the majority of people believe that banning single-use plastics is the best way to tackle the ocean plastic crisis. 83% of respondents found that businesses are not doing enough, and 74% stated that governments are doing too little as well.

Worldwide opinions on plastic have turned towards a vision of a world without senseless single-use plastic. Yet the plastic production industry has been betting on expansion and counting on the growing demand of two large groups: millennials and citizens in growing nations. This completely ignores societal and cultural evolutions. All the reviewed surveys that differentiated on age have shown that [millennials are by far the group most concerned with plastic waste](#), and in global surveys the citizens of developing countries have expressed [more than average concern](#) on plastic pollution. It's also in Latin America ([93%](#)), BRIC countries ([91%](#)) and the Middle East/Africa

([90%](#)) where the support for a global plastic treaty is the highest among its citizens. This is due to the fact that they are the ones affected the most by plastic pollution and a decrease in marine ecosystem value.

As we've seen, the people's perception is drastically against plastic, but only a small minority finds their way to weekly markets or unpackaged shops. It's important to resist the urge to frame the plastic crisis as a problem of undesirable behaviour by consumers. Plastic producers keep flooding consumers with plastic, making it difficult to quit plastic as an individual. We have to address the plastic problem at its cause, by targeting massive single-use plastic producers such as INEOS or Borealis.

This provides an extraordinary opportunity for policy makers to make a tremendous impact on the climate, without any notable opposition. In most cases, people will simply not miss the extensive use of plastic. In fact, by banning unnecessary plastic, we can save carbon budget and fossil fuels for plastic that is vital for medical or highly specialised cases. Most of us would remain creatures of habit, and buy whatever is on the supermarket shelves, with or without plastic. When the EU directive on single-use plastic was implemented in the EU nations, no one batted an eye about no longer receiving a plastic bag or straw. When the French government decided to ban plastic in its vegetables and fruit section, there was no storming of the Bastille by angry citizens demanding their plastic back.



3. The role of INEOS and Borealis in this plastic crisis

According to the Minderoo foundation, in 2019, [only 20 plastic makers accounted for more than half](#) of all single-use plastic waste generated globally. INEOS ranks 13th globally and 4th in Europe in single-use plastic production. They rank even higher accounting for the flood of base chemicals used in the plastic production process, making them the [fourth largest chemical firm](#). While Borealis, the second company reviewed in this research, is significantly smaller and more unknown than INEOS, they are the [second largest European producer of single-use plastics waste](#). This makes them the 11th largest worldwide, right before INEOS.

And both companies are planning to become even bigger. They already have significant operations in the Belgian Port of Antwerp and want to expand these on a massive scale. In 2019, INEOS announced plans for their [Project One ethane cracker](#), while Borealis is already building a [propane dehydrogenation plant](#) to produce propylene. These investments account for the largest chemical investment in Europe this generation. In 2022, in a world where [the public has grown weary of plastics](#), the Kallo facility of Borealis would increase European production of propylene by 10%, and INEOS' Project One would increase ethylene production by 7.5%. In this dire time, when we should be decreasing plastics production, INEOS and Borealis are expanding theirs.



INEOS

The INEOS story started in [1998 in Antwerp](#), Belgium, with a single petrochemical plant, and grew rapidly over the decades that followed. Jim Ratcliffe, the founder and CEO of INEOS, has been following the same script for the last 20 years. [By buying facilities of competitors on the cheap](#), he has been able to expand the INEOS group to its [194 current locations](#), spread across 4 continents. Later in this chapter we'll discuss his plans to add one more location to his resume: The Project One cracker.

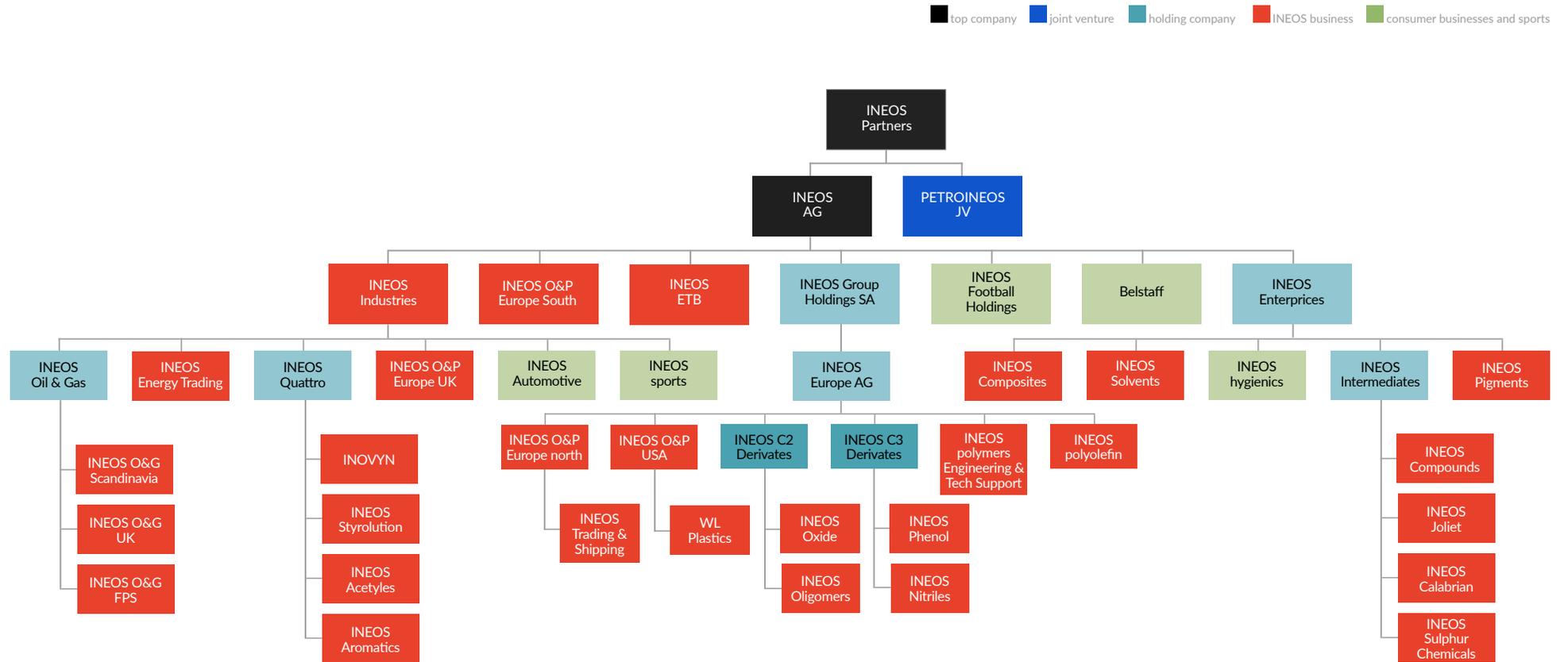
To understand how INEOS operates around the globe it is important to see INEOS as a federation of different companies. This creates a complex maze of

holding companies, finance vehicles, subsidiaries, joint ventures, offshore branches etc.

When INEOS' high risk strategy caused financial troubles in the wake of the 2008 global crisis, [it moved its headquarters to Switzerland in 2010](#), where it would benefit from the [favourable corporate tax rates](#). But in 2016 they announced with great fanfare a state of the art new London headquarters as a supposed return to their UK roots. In actuality, they kept the corporate registration of [INEOS AG in Switzerland](#). This in turn is owned by INEOS Limited, the ultimate parent company and the corporate umbrella of Ratcliffe and co-owners Andy Currie and John Reece. This company is registered in the British Crown territory [Isle of Man](#), nestled between Ireland and the UK. This small island is a notorious [tax haven](#) and it's no different for INEOS. Even though it's registered on the Isle of Man, they have no active business operations nor a real office there. Meaning that [Ratcliffe's \\$61 billion company](#) is effectively a [mailbox company](#) in the ironically named neighbourhood of [Little Switzerland](#).

Turnover \$61bn	Employees 26 000	Production 54m tonnes	Locations 194
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INEOS in 2021, from the INEOS 2021 [Sustainability Report](#)



The complicated corporate structure of INEOS Limited, from the INEOS 2020 Sustainability Report

When discussing INEOS' stake in the plastic crisis, it is important to realise that they produce [a whole range of products](#) from base chemicals to consumer goods. They even own sports teams. The well-oiled INEOS PR team attempts to [shift our attention](#) to their products used in automotive industries and wind turbines, to alcohol gels to combat COVID-19, and to other non-plastic related products. The organisational chart above shows us the complicated corporate structure of INEOS Limited, which can give us a closer look into how much of their activities can be attributed to the production of plastics. Isle of Man registered INEOS Ltd owns Swiss based INEOS AG, which in turn has six major and direct subsidiaries. It's important to note that all of our used data is adjusted for their plastic activities.

For INEOS AG, 56% of their activities were tied to plastic production in 2020, with the majority of their plastic production based in INEOS Industries and INEOS Group Holdings SA. Other subsidiaries, such as their Football Holdings and Belstaff clothing, have nothing to do with the plastic crisis. Every subsidiary we found data for will be adjusted according to their share of plastic activities. For example: if we found a €100 000 000 loan to INEOS AG, we attribute 56% of it to their plastic activities. Adjusting the other subsidiaries in this way might lead to a rise in their share of plastic activities (up to 81% for INEOS Group Holdings) or a decrease (down to 19% for INEOS Enterprises).

INEOS' Carbon footprint

According to the [2021 INEOS Sustainability Report](#), their 2020 total GHG footprint is calculated to be 19.9 million tonnes CO₂-equivalent. According to their promotional [INCH magazine](#), the INEOS science base is being used by each company to calculate current emissions and plan future reductions. INEOS doesn't elaborate how they calculated this number, but they conveniently didn't take the scope 3 emissions of their entire value chain into account. Since INEOS has more activities besides plastic production, it might be interesting to calculate just how massive the carbon footprint of only their plastic production is.

Scope 1 emissions are released into the atmosphere as a direct result of the corporate activities and assets. This includes assets such as the Grangemouth refinery, [which is Scotland's largest polluter](#).

Scope 2 emissions are the indirect emissions due to the electricity or energy the INEOS plants use. Knowing that [75% of INEOS' energy](#) is sourced through fossil fuels, this number is substantial in their case.

Scope 3 emissions are all the emissions down the entire value chain, for which the organisation is indirectly responsible. Scope 3 is almost always the largest in terms of emissions, and is not included in INEOS' emissions reporting.

As we've seen in previous sections, the production of plastic is a polluting industry, with a large carbon footprint. INEOS plans to tackle this enormous carbon footprint and joined the increasing list of big polluters who proclaim to [become net-zero by 2050](#).

It's interesting to look closely at how they intend to reach this goal. In their [2021 Sustainability Report](#) they argue that, whenever an INEOS product is used further downstream in a decrease of emissions (for example when customers use lighter plastic instead of steel), INEOS can subtract this from their own emissions. Meaning that if their scope 3 emissions decrease due to actions of their customers, they subtract this from their scope 1 and 2 emissions. So instead of reducing their emissions, they are using creative mathematics to go net-zero.

As we've seen in a previous chapter on the climate impact of plastic production, greenhouse gases are emitted at every stage of the plastic value chain. While it is hard to calculate just how much plastic producers are emitting, Pew Trust, SYSTEMIQ, and Carbon Tracker calculated the average carbon footprint at [5 tonnes of CO2 per tonne of plastics](#) during its life cycle. As we've seen, this would account for 19% of the remaining carbon budget by 2040. These 5 tonnes of CO2 give us a certain rule of thumb with which we are able to calculate INEOS' total burden on the climate. Their plastic pollution doesn't end when it leaves the factory, even if INEOS stops counting their carbon footprint there.

According to INEOS the total production of all its activities in 2021 was a staggering [54 million tonnes](#). As we've seen above, we can roughly estimate that about 56% of INEOS' activities are attributed to plastic production. So when taking into account the rule of thumb of 5 tonnes of CO2 per tonne of plastic, multiplied by 56% of their total production, we reach a carbon footprint 7.5 times the size of their own reported number.

Total production*plastic adjuster*average carbon footprint plastic

54 000 000 tonnes of production * 0.56 * 5 tonnes of CO2 = 151 200 000 tonnes CO2-eq in 2021 alone

However, one can argue that the plastic used in wind turbines, solar panels or used to replace heavier and more polluting materials could hardly be contributing to the plastic crisis. The same argument goes for the fact that plenty of base chemicals used in the production of plastic don't have the same carbon footprint as the finished product. So we are left with an exaggerated number.

Nonetheless, even if we would only account for the [26%](#) of products that INEOS themselves reported to be packaging for the food industry, their carbon

footprint is about as much as the [yearly CO2 emissions of Belgium](#). And about 3.5 times bigger than their own reported number of their total GHG emissions.

Total production*food industry packaging adjuster*

average carbon footprint plastic 54 000 000 tonnes of production * 0.26 * 5 tonnes of CO2 = 72 800 000 tonnes CO2-eq in 2021 alone

As we've seen in the previous part on economic risks, the external costs of plastics brought upon our fragile ecosystems equal ten times their market value. Following the [2021 WWF plastic research](#), our societies around the world are left with the bitter bill of \$10 000 per tonne of plastic in costs relating to GHG emissions, health, ecosystems, and waste management.

Due to insufficient data on their total plastic production, it's hard to calculate the full external costs INEOS inflicts on society. If we would only account for the [26%](#) of packaging for the food industry, the external costs amount to a staggering 140 billion dollars each year. The actual number for their full plastic activities will be even higher. There is a discrepancy between where INEOS is booking their

taxes (by registering their holding companies in [Luxembourg](#), [Switzerland](#), and [Isle of Man](#)), and the places suffering the most from their petrochemical air, water, and soil pollution, such as the Port of Antwerp, Grangemouth and [Louisiana's Cancer Alley](#).

Carbon Capture and Storage (CCS)

One of the ways INEOS wants to decrease their emissions is through capturing and then utilising or storing the greenhouse gases emitted by the polluting INEOS' plants, the famed [Carbon Capture and Storage \(CCS\)](#).

While policy makers and companies around the world believe this technology to be valuable to mitigate certain emissions, it's [under scrutiny by environmental groups](#) due to the fact that often, emissions aren't decreased, but promised to be captured in a later moment with [technology that doesn't exist yet](#). Carbon capture systems that already exist often aren't as green as they claim. A 2022 Global Witness research for example, found that Shell's massive carbon capture facility [emitted more than it captured](#).

The current data shows that INEOS reports over [one million tonnes of CO₂-eq](#) captured in the last decade. This means about roughly 100 000 tonnes of CO₂-eq a year. When divided through their self-reported 20 million tonnes of CO₂-eq, this means they are effectively capturing 0.5% of their total GHG emissions

at the moment. When we calculate this using their full carbon footprint (scope 3 emissions included), this number decreases tenfold. So at the moment, INEOS is [capturing our attention with their CCS projects](#), but it only captures a fraction of the carbon they emit.

In 2021, they announced that they would expand their carbon storage capacities with their [Greensand project in Denmark](#), which would be able to store 0.5 - 1 million tonnes of CO₂ annually (2.5%-5% of their total annual emissions). At the same time, they bought the [Syd Arne oil fields](#) just 50km away from Greensand, where INEOS Energy intends to [boost production over the next 20 years](#). The CEO of INEOS Energy has confirmed that [INEOS has no intention of stopping their fossil fuel extraction operations before 2050](#).

It's becoming increasingly difficult to accept INEOS' net-zero promises as they transition from the chemical corporation they were in 1998 to an integrated fossil fuel force. Jim Ratcliffe himself wanted INEOS ["to become the biggest player in the UK shale gas industry"](#), already having accumulated [1.2 million acres of shale gas exploration](#) licences in the UK.

And while at the moment fracking in the UK has been [under a moratorium since 2019](#), recent energy price hikes in 2021 and 2022 have pushed the UK government to [re-explore UK fracking](#). INEOS has even offered a [shale gas test site](#) to demonstrate the supposed safety of fracking in the UK. This contradicts

the [IEA 2021 study](#), which called for a halt to all new oil and gas exploration by the end of last year if we are to achieve net-zero emissions by 2050. This polluting and unconventional fossil fuel extraction uses tremendous amounts of energy and releases more methane than conventional extraction. This makes shale gas a [more polluting fossil fuel than coal](#), and incompatible with the UK and EU's climate goals.

Plastic powered by fossil fuels

Another pillar of INEOS' climate strategy they often bring up, is their large use of renewable energy. [INEOS' own reported energy footprint totaled 311.3 Pj/y](#) in 2020. This is more than the entire annual electricity [consumption of Belgium](#), and [a third of the UK](#). And while they claim that most INEOS sites use clean energy, only [4% of their total energy footprint consists of renewables](#). The rest is mostly fossil fuels. This is peanuts compared to the [UK's 43%](#) or the EU average of [22%](#) of renewable energy in their total energy consumption. Even their recently applauded offshore wind energy purchases in Belgium would only account for a decrease in [1%](#) of their total self-reported yearly emissions.

INEOS themselves see a key role for hydrogen in their grand net-zero promise, and announced over [€2 billion in investments at the end of 2021](#) towards green hydrogen production. However, when compared to their total 20 million tonnes of CO₂-eq emissions, these big new investments would account for a



reduction of 0.7%. Globally, over [95%](#) of hydrogen is still produced using fossil fuels, losing [70%](#) of the energy in the process. Yet INEOS is still promoting hydrogen as a zero carbon technology in their [sustainability report](#), when at the moment, this is not the case.

Air, soil, and water pollution

In 2015, INEOS started building a brand [new waste power plant](#) in Runcorn near Liverpool, where they would generate energy by burning rubbish and the very plastics that they are responsible for. Heedless of [the impact on human health and the quality of life](#) of the residents nearby, they still classify this project as [biopower](#).

This is not the only problematic INEOS facility when it comes to air pollution. Greenpeace noted in 2019 how INEOS clocked up [176 permit violations](#) between 2014 and 2017, of which 90 were related to air and water emissions. According to a compilation of environmental ratings by CSRHub LLC, [INEOS ranks in their lowest category](#).

Of these direct environmental problems, [the pollution caused by plastic nurdles](#) is probably the most tangible. After tyre dust, these nurdles are the second-largest source of micropollutants in the ocean by weight. These tiny plastic pellets are used as building blocks for the variety of plastics we use everyday. But during production and transportation,

billions of these tiny pellets end up in nature, specifically in the ocean and in the stomachs of birds and fishes.

During a 2020 nurdles hunt by Antwerpen Schaliegasvrij, about [22 000 nurdles were collected, at 50 spots along the Scheldt river](#). INEOS acknowledges this grave problem and joined the [Operation Clean Sweep campaign](#), an initiative organised by a consortium of plastic producers to reduce the plastic nurdles pollution. Antwerpen Schaliegasvrij notes that this [engagement is voluntary and not checked](#), leaving the Scheldt river and North Sea at the Port of Antwerp still [highly polluted with these plastic pellets](#).

PROJECT ONE: cementing the Port of Antwerp in a Plastic future

With Antwerp as [Europe's largest](#) and the world's 2nd largest petrochemical cluster, Belgium is proudly propagating being the [world's number 1 regarding chemicals and plastics sales per capita](#). In 2019 INEOS decided to expand this even further by unveiling plans for their 3 billion euro Project One in the Port Of Antwerp. INEOS has called this massive project [the largest petrochemical investment in Europe for a generation](#). In the 2020 report "[How our government and banks are trying to fill the bottomless pit of INEOS](#)", FairFin delved into this polluting plant.

Even though INEOS is naming this plant the future of the petrochemical industry, it's going to depend on polluting US shale gas as feedstock and the production process will be more polluting than promised. While they have already suspended [half of their project due to financial troubles and oversupply](#), they still intend to build an ethane cracker. In this energy and carbon intensive facility they will crack shale gas under high heat into ethylene, which is a building block for the many sorts of plastic we are familiar with.

Fossil fueled Project One

To call it energy intensive might be an understatement. In the Project One environmental application, we can read that they will be importing [1.9 billion kilogram](#) of US ethane shale gas annually, to use as feedstock in their cracker. To fuel this cracker, they will be using on a yearly basis: [240 million kg of hydrogen, 102 million kg methane, and 5,4 million kg of ethane](#).

We often forget that besides being incredibly polluting, the petrochemical industry uses a lot of energy to turn fossil fuels, potential energy, into products such as plastics. Since [the cleanest energy is the energy we don't use](#), the fact that Project One will be using the fuel that we need for a green sustainable transition to make building blocks for plastics is outrageous.

If we multiply these gases with their [energy density](#) (the energy stored within them), we can calculate all the wasted energy in the annual exploitation of Project One. When not taking into account the gases that are produced as a by-product of Project One to then be used as fuel for the cracker, we reach a staggering 29 billion kwh. To put this in perspective, the entire country of Belgium generated about [79 billion kwh](#) in electricity in 2020.

That means if Project One gets built, the energy value of the annual input for this single cracker will be as much as a third of Belgium's annual electricity production. And while it's not as simple as diverting the gas from Project One to produce electricity or heat our homes, it does give us a sense of the scale of wasted energy we're dealing with.

The economics are shaky

The economic viability of this project is very questionable. With the arguments discussed in the previous chapters in mind, we should not forget the current oversupply on the plastics market and the coming regulations concerning the plastics crisis. Knowing this, it's important to point out INEOS is counting on tax money to make Project One happen. The Participatiemaatschappij Vlaanderen (PMV), the public investment company of Flanders, is [guaranteeing between 250 and 500 million euros for this project](#). Meaning that if there is profit, the banks can line their pockets, and if there are losses, the taxpayer gets the short end of the stick.

In December 2021 the Institute for Energy Economics and Financial Analysis (IEEFA) published their [analysis of Project One](#) and the ethylene market. Their conclusion is clear: Project One is a risky venture at a time when the European Union is shifting towards a decrease in the use of single-use plastics. This combined with slow economic growth, weak margins, global oversupply and cheaper import from China and the USA make its financial viability questionable. The IEEFA states that Project One alone would [add 18 percent](#) to the entire European ethylene capacity when it plans to come online in 2026, but the entire global demand is forecasted to [only rise by 3%](#) between 2022-2026.

A blind spot in the policies of the banks

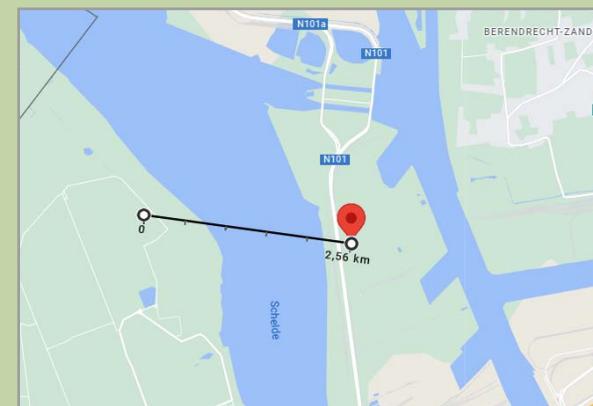
As previously stated, Project One will rely on [the continuous availability of low-cost shale gas](#) from the United States as a source of plastic feedstock. While there's enough to be said about the [ethics of fracking](#), some questions on its financing also arise.

It caught our attention that all 4 of INEOS' creditors active in Belgium (ING, Deutsche Bank, BNP Paribas, and KBC) have active policies on unconventional oil and gas.

- ✗ ING has a policy [not to finance shale gas in Europe](#)
- ✗ Deutsche Bank promises [no more funding for fracking projects](#) in countries with scarce water supplies
- ✗ KBC stopped funding the [exploration and development of unconventional oil and gas](#).
- ✗ BNP doesn't fund companies which get a significant part of their revenue from [unconventional oil and gas](#).

Yet together they have financed INEOS' plastic production with 2.75 billion euros.

In theory their loans towards INEOS fall within their current policies. But the fact that Project One will use [28 billion kwh worth of shale gas](#) annually, and that this would still be in line with the banks' policies suggests that we need a stronger unconventional oil and gas policy from these banks.



Distance between Project One and UN-protected wetlands

Another case of “practice what you preach” is the suggested site of Project One and its proximity to the Ramsar site “[Schorren van de Beneden Schelde](#)”, which is a UN-protected wetlands with precious biodiversity.

The four creditors active in Belgium have strict policies concerning these protected areas. [KBC](#) and [ING](#), have said that they will not finance activities significantly impacting those areas. [BNP Paribas](#) said that they won’t fund unconventional oil and gas projects in Ramsar sites, and [Deutsche Bank](#) requires an enhanced environmental and social (ES) review for projects impacting Ramsar sites.

Just 2.55 km from the protected wetlands, on the other side of the river Scheldt, INEOS is planning to build their CO2 and nitrogen emitting ethane cracker. [Vulnerable wetlands such as the Ramsar sites](#) have proven to be especially at risk for water and air pollution. It is because of this that the Dutch province of Zeeland [filed an appeal for Project One’s environmental permit](#), claiming that the nitrogen emissions of INEOS will negatively impact their Natura-2000 areas nearby. In their environmental permit, INEOS says that [far-reaching measures against nitrogen emissions are too expensive](#) to implement.

On top of this, the ethylene provided by the Project One Cracker will be used to make [plastic pellets](#) in other factories of INEOS, ExxonMobil, or BASF in the Port of Antwerp, to then be transformed into the myriad of plastic products surrounding us.

[A new 2022 report published by Plastic Soup Foundation](#) found that the leakage and pollution of plastic pellets in the River Scheldt is even worse than estimated. Millions of these plastic nurdles are found on the coastlines, the protected wetlands, and in the stomachs of animals.

Project One: the cracker of the future?

In a [2020 study done by the Flemish governmental Agency of Innovation](#), 4 transition paths were defined for a climate strategy for the Flemish industry of the future.

- ✘ Circularity, with a focus on the reuse of plastics.
- ✘ The use of biomass as energy and feedstock.
- ✘ Electrification and an increased use of hydrogen.
- ✘ Capture, storage, and reuse of CO2.

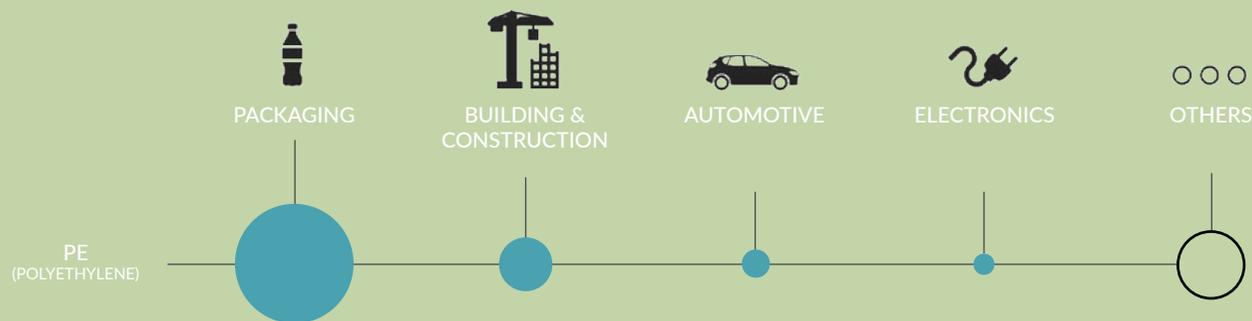
As we’ll see, Project One doesn’t fit in any of these transition paths.

So the first question is, what will Project One’s ethylene be used for? [On their website](#) they refer to: “high-quality products in the automotive, construction, energy and medical sectors”. While this is undoubtedly true to some extent, when we look at the European-wide use of polyethylene plastic below, packaging still takes up the largest part.

Project One will be producing the building blocks of new virgin plastics, of which [26% will be packaging](#) according to their website. From the factory, to be used once, to the trash bin. [Project One will add nothing to the circular economy](#), except a delay.

The uses of polyethylene.

The second transition path focuses on the use of bio-based or renewable energy and feedstock. But as we've seen, INEOS counts on cheap shale gas as feedstock for their Project One cracker. And even though 20% of Project One could be fueled by bio-propane gas, this doesn't exist on an industrial scale yet. Regarding the other 80%, they themselves admit that [bioethane gas doesn't exist, nor will there be any use of recycled feedstocks](#). So the use of biomass as energy and feedstock will be limited to 20%, in a distant future.



The uses of polyethylene, from World Economic Forum

We know that INEOS will be fueling its cracker by using massive amounts of gas, which they call [state-of-the-art technology](#). But they do not mention the [electric crackers](#) being built that could eliminate fossil fuels altogether, reducing emissions by 90% in the process. While hydrogen generated as a by-product of the shale gas will be used, Project One is not electrified. This is [deemed too expensive](#) by INEOS, which is still clutching on to fossil fuels.

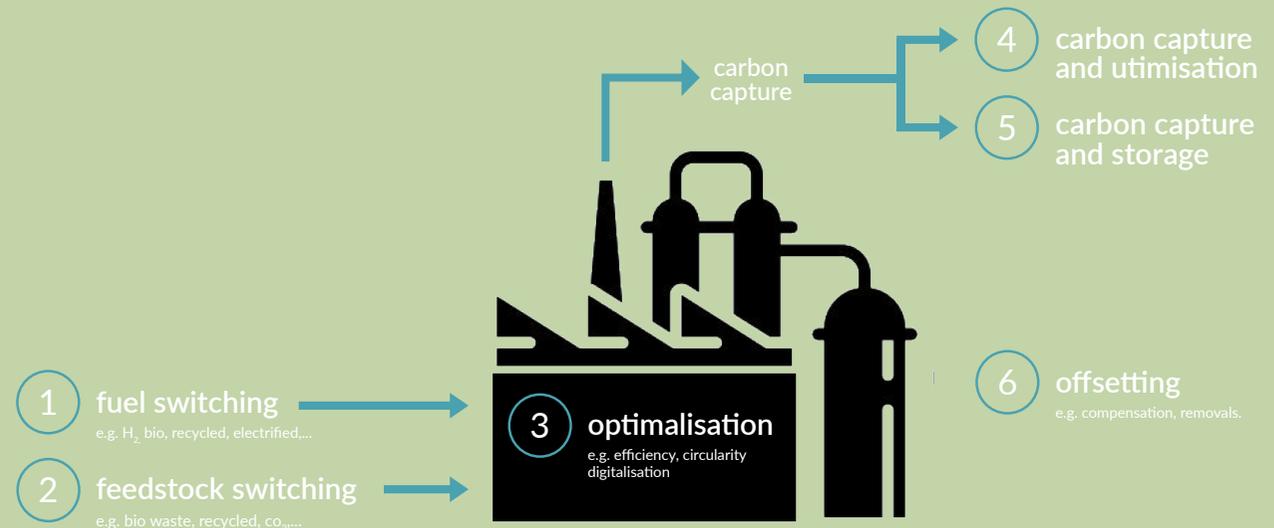
And we can see this pattern all throughout [INEOS' environmental permit](#). The technology exists and is being implemented in other facilities, but it is still quite costly at the moment. Costs they can't afford in an oversupplied ethylene market, which they admit in their environmental permit. They use polluting US shale gas, because they don't see [any other feedstock to be realistically economically viable](#). The same story can be told about their promised Carbon Capture installations, the fourth transition path. At the moment it is deemed too costly, so they are [betting that in the future, new technology will be less expensive](#).

And what's most peculiar is that Project One doesn't even fit within [INEOS' own 6 pathways to net-zero](#) listed below.

- ① We've already seen that besides the use of hydrogen, Project One will not be switching to bio, recycled or electrified fuel.
- ② Nor is it possible to switch to bio feedstocks on an industrial scale.
- ③ Even though Project One will be more efficient than its decades older counterparts, the most efficient technology is deemed too expensive, and a new cracker locks in the use of fossil fuel for longer.
- ④ ⑤ The same story goes for the carbon capture technologies: their emissions will not be captured, nor utilised due to its high cost.
- ⑥ Project One will be legally obliged to [compensate for its deforestation](#), and will have to pay for its emissions [under the European ETS scheme](#).

INEOS promises that their plastics plant will be less polluting than comparable ethane crackers and would be in the top of Europe. But since their cracker is the first new one in decades, it is not surprising that the technology progresses. However, its relatively better result does not matter, since [it's not there to replace an older cracker](#). It's just another one being built. We need less plastics, not just greener plastics.

In conclusion: Project One won't have biomass as energy nor as feedstock, won't contribute to the circular economy, is not as electrified as they could be and their emissions won't be captured and stored. What INEOS calls [groundbreaking for European chemistry](#) doesn't fit the strategy the Flemish Government, nor INEOS themselves, have set out for the future.



INEOS' 6 pathways to net-zero, from the [INEOS sustainability report 2021](#)

INEOS' business model is incompatible with a green future

In the 25 years since Ratcliffe's first petrochemical plant in Antwerp, he has mostly kept the same business model. [Funded by high-risk loans and junk bonds](#), he was able to accumulate collateral to gather more debt, to finance the next take over, to ultimately form the conglomeration of companies that form the INEOS group today. By buying undervalued and unprofitable chemical operations from [big multinationals such as BP](#), INEOS was able to cheaply buy the facilities the other companies wanted to get rid off. These acquisitions are then followed by [aggressive cost cutting](#) to help turn around underperforming companies and double their sales within five years. This means that in order to generate a profit, costs are reduced, and investments needed to reduce their emissions, such as in their Project One cracker, are [deemed too expensive](#).

So even though INEOS loves to tout a green and innovative image, it remains a profit driven petrochemical giant. A [2017 Food & Water Europe research](#) reported on the extensive list of chemical leaks, accidents, and fires in INEOS' production plants, exposing a pattern of environmental disregard in their locations in Europe. This strategy of [corporate ruthlessness](#), where they cut costs to exploit unprofitable chemical plants, makes their business

model incompatible with the necessary investments needed to make our industrial production green.

So while the big oil and gas companies are [increasingly transitioning away from fossil fuels](#), private companies such as INEOS are cheaply buying their assets to ramp up production. Big players such as Shell, BP, and Total are feeling the heat of their shareholders urging them to commit to renewables, selling off assets as a quick way to hit climate-related targets. While this creative carbon accounting works to generate easy green victories for Big Oil, it's nothing but moving emissions from one hand to the other instead of decreasing them. Whereas Ratcliffe's INEOS has little accountability due to its private nature, the impact associated with plastic production unleashed on society is everything but private. Aptly named "[A New Breed of Vultures](#)" by Bloomberg, INEOS is hungry for acquisitions. All of this is backed by banks pouring money into more plastic production.

The money making it all possible

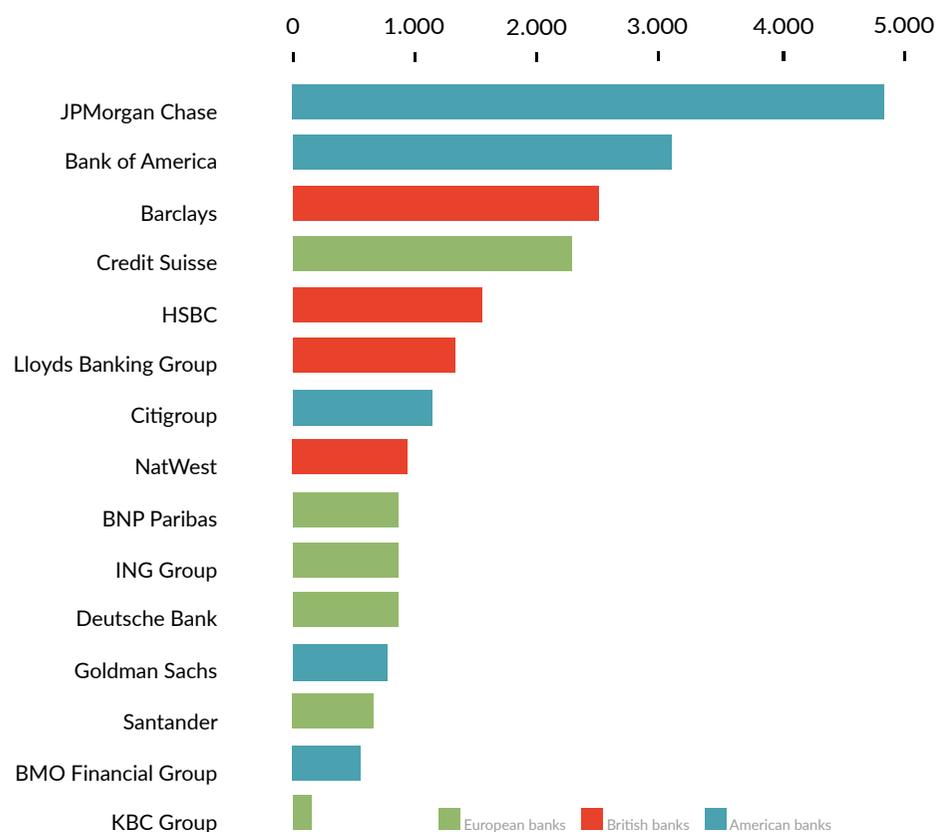
INEOS' rapid rise as a chemical company is thanks to banks providing them with cheap loans. They wouldn't be able to build a polluting Project One without the banks and their money, giving the latter a key role in our planet's future. Thanks to data provided by Profundo, we can now see who is bank-rolling plastic production.

All the data used is adjusted for INEOS' activities attributable to plastic production. INEOS' other chemicals, its sport teams or other activities don't count for the €19.6 billion in loans and underwriting of bonds attributed to plastic between 2016 and 2021.

Most of the loans and underwriting we found provided vague and untransparent use of proceeds such as "General corporate purposes", giving us little information about what these loans would actually be used for. Due to lack of transparency by the allocation of the banks' funds, the adjusters calculated by Profundo are useful to estimate which parts of those indistinct loans were used for plastics production.

This also means that the banks did not breach their own policies by investing €19.6 billion in INEOS between 2016 and 2021, even though they have strict policies regarding the financing of shale gas projects and projects impacting UN-protected wetlands, plus other investment policies relevant to Project One. Their policies contain important loopholes because they apply these conditions to project finance and not the general and vague company finance that we see in INEOS' and Borealis' case.

Top banks financing INEOS between 2016 and 2021, Credit and bonds, in EUR million



[Two of the biggest banks in the world](#), JP Morgan and Bank of America, are the largest creditors of INEOS with €4.8 and €3.1 billion in loans, underwriting, and bonds. The second largest UK bank Barclays follows suit, with HSBC and Lloyds not far behind, the largest and third largest UK banks respectively.

Some of the EU's largest banks, such as BNP, ING, and Deutsche Bank, are also big creditors. In total, these 15 banks provide about 90% of INEOS' total credit and underwriting of bonds. The other banks and investors have smaller exposure to INEOS, mostly in the form of the bondholding. It's important to note that this data is not exhaustive, and some loans and bonds might not have been recovered in the used databases.

Geographically, about half of the money is coming from the USA, and the UK and Europe account for another quarter each. From this European tranche, about a third is provided by banks active in Belgium. Notably BNP Paribas, ING Group and Deutsche Bank supplied Ratcliffe with loans to continue his acquisition spree to expand his plastic kingdom.

While the rest of the listed banks are not among the biggest players, almost all of them appear in the top 20 of most polluting banks of [the 2021 ranking by Banking on Climate Chaos](#), with JP Morgan on top, Citigroup second, and Bank of America fourth. Those are the same banks spearheading the [Glasgow Financial Alliance for Net Zero](#), even though

investing in the expansion of plastic is incompatible with a net-zero world.

We have seen the climate impact of plastics and its large share in our remaining carbon budget. A net-zero world, and one where we can stop climate change at 1.5° C, will have to be a world with a smaller plastic footprint.

Furthermore, these loans were not only for acquisitions. In our financial data, we found 336 million euros of loans intended for – among other things – dividend payments in October 2020. These loans were provided by BNP Paribas and Deutsche Bank among others. While it is not unusual for large companies to take out loans for dividend payments, this is incidentally around the same time [several of INEOS' subsidiaries' credit ratings were decreased](#) due to the impact of Covid-19 on the chemical markets. During the same time, [half of Project One was postponed](#), leaving only the ethane cracker. So while INEOS was in bad papers due to the pandemic, they rewarded themselves with €336 million in dividends attributable to plastic. On top of this we should note that the Isle of Man, where INEOS Ltd is registered and dividends are paid, operates under a [0% tax on dividend income](#).

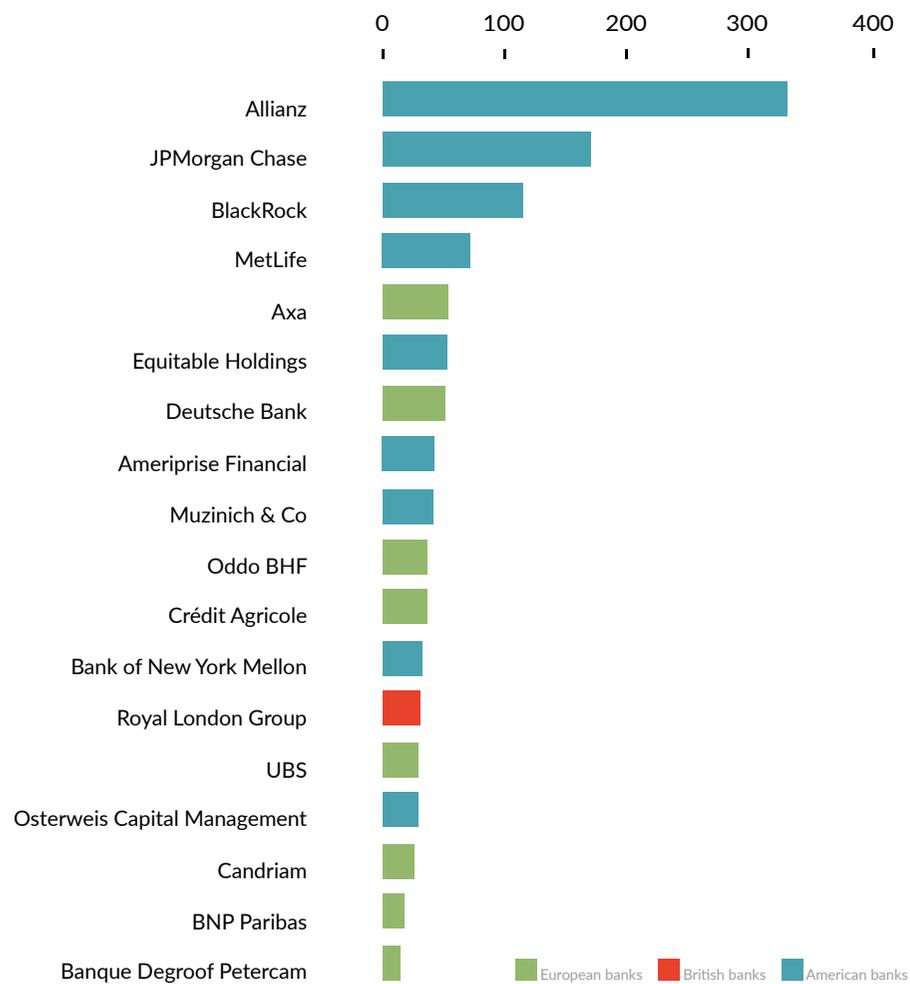
At the moment, all of the rated subsidiaries and bonds have a “junk” rating judged to be non-investment grade and speculative. These are bonds that carry a higher risk of default than most bonds issued by corporations and governments. S&P downgraded

A net-zero world, and one where we can stop climate change at 1.5°, will have to be a world with a smaller plastic footprint.

[INEOS Group Holdings S.A. to BB](#), Fitch demoted [INEOS Quattro to BB](#) as well, and Moody's rated [INEOS Finance Ba2](#) and [INEOS Enterprises Ba3](#), which is even worse.

Banks and investors also have financial links to INEOS via bonds they hold in their investment portfolios. With insurance companies accounting for over 40% of all bondholders, it's worth considering why they'd invest in a sector where annual external costs are [ten times higher](#) than the whole market value of plastics. While governments and individuals around the world will bear the brunt of these costs, insurance firms will not be left out of the equation when the 140 billion dollar bill for INEOS' externalities is shared.

Top bondholders of INEOS between 2016 and 2021, in EUR million





Borealis

Even though Borealis has its headquarters in Vienna these days, Borealis was created in 1994 [as a merger of the petrochemical interests of Statoil and Neste](#), the Norwegian state energy company and the Finnish state oil company respectively. From its humble beginnings to its place in the world now, its plastic production has been state-funded and -controlled. So while Austria, Norway, and Finland often rank high in international sustainability rankings, they are, ironically, blindly supporting the plastic crisis funded by European and American banks.

Since 2020, 75% of the company is owned by the Austrian oil & gas giant OMV, which in turn is owned by the [Austrian](#) and [United Arab Emirates](#)' sovereign wealth funds. The other 25% ownership of Borealis is owned through UAE's sovereign wealth fund Mubadala. These state-owned companies should take up their role as shareholders towards a green transition instead of a plastic expansion. It's peculiar to see how Austria is implementing [policies to curb plastic pollution](#) and move towards re-use, while profiting from the expansion of virgin plastics at the same time.

From these key figures we can see that Borealis is a significantly smaller company than INEOS in revenue, employees, production and locations. While they claim to be operating in [120 countries](#), their website only lists 60 locations in [31 different countries](#). Nonetheless, they are a worldplayer in the plastics game, operating [the world's largest polyolefin plastics production plant](#) in a joint venture with the state owned Abu Dhabi National Oil Company in the United Arab Emirates.

Of course Borealis doesn't only produce plastics. Because of this, we adjusted the found data for Borealis to their activities attributable to plastics. Borealis has three main segments of activities in their group: polyolefin plastics, base chemicals, and fertiliser.

First and foremost, they are the 8th largest [polyolefin plastic](#) producer in the world. Borealis loves to focus on the use of their plastics in highly specialised [automotive](#) or [energy sectors](#), but to be frank, this is the most common type of mass produced plastic used in [packaging](#) and other types of single-use plastics.

2020 Net Revenue €6.8 bn	Employees 6 900	2020 Polyolefin plastic production 5.8m tonnes	Locations 60	Countries 31
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Borealis in 2020, from [Borealis' website](#)

This entire segment is therefore completely attributable to plastics. Secondly, Borealis makes base chemicals, ethylene and propylene among others, which are the building blocks for virgin plastics. In this segment only 63% is attributable to plastics. And lastly, only 3% of their fertiliser activities are attributed to plastics.

In total, we can ascribe 64% of Borealis' financing in 2021 to the plastic crisis.

Borealis' big green empty promises

To give an indication on the evaluation of Borealis' policies: [the Plastic Waste Makers Index gave Borealis' plastics policy a "C-"](#) in their circularity scores, signifying that the "producer has some proof of action to reduce fossil fuel derived plastics". With 54 of the top 100 polymer producers scoring their lowest grade of "E", and no one scoring "A" or "B", Borealis' C- is actually among the better performing plastics producers. That being said, it's hardly a grand achievement to be among the better pupils of the class if everyone in the class is failing, Borealis included.

As we'll see in the following pages, Borealis' PR team seem to be experts in making great sounding promises, without promising anything at all. We'll take a closer look at the main targets and promises made by Borealis in [their 2020 annual report](#) listed here on the right (published in March 2021).

Borealis' main sustainability targets

Goals for Energy & Climate for 2030 are:

- 50% of electricity consumption from renewable sources
- 20% energy efficiency improvements (compared to 2015)
- Zero non-emergency flaring

Goals for the Circular Economy for 2025 are:

- 350,000 tonnes of recycled polyolefin delivered annually for the production of second-generation products 100% of consumer products being recyclable, reusable or with renewable content

Goals for Health & Safety remain constant and resolute:

- Zero work-related incidents or accidents
- Zero harmful substances in our products according to REACH

Borealis recognizes climate change to be [“the biggest threat to our civilisation”](#) and knows they have to significantly reduce the impact of their plastics production. So, Borealis group has joined the now long list of companies promising to become climate neutral by 2050. However, as we’ll see further in this chapter, almost all of their flagship sustainable projects are in Europe, and almost none of their green promises go further than European legislation or plans.

This shows the necessity of ambitious legislation: we can’t count on big polluting industries to take the initiative themselves and to make investments which might be costly in the short term, but necessary in the long run.

Borealis’ Carbon footprint

In [their own words](#), “Borealis has a responsibility to reduce its carbon footprint, as well its products’ total life-cycle emissions.” It might therefore be worth taking a look at their current emissions. They publish their annual GHG emissions for scope 1 and 2, and in 2019 this amounted to [5.1 million tonnes](#) of CO₂-eq emissions. Just like in INEOS’ case, this number is far too low, since it doesn’t take into account its products’ total life-cycle emissions. To calculate their carbon footprint attributable to plastic, we will use the same formula as with INEOS.

 if Borealis would be held accountable for the plastic it floods our streets with, there would be little left of the company. When we compare this cost to the \$132 million Borealis paid in income taxes in 2020, we can calculate that Borealis annually costs society 440 times more than it pays back.

For 2020, Borealis reported a production of 5.8 million tonnes of polyolefin plastics. When multiplied with the 5 tonnes of CO₂ emitted during the life cycle of one produced tonne of plastics, a number calculated by [Breaking the Plastic Wave](#) and [Carbon Tracker](#), we reach an annual plastic carbon footprint of 29 million tonnes of CO₂-eq. This only concerns their finished polyolefin plastics and does not even take into account their base chemicals or fossil fuel feedstocks used for plastic production. At the moment, they don't have a concrete reduction target in place for these emissions.

Besides the CO₂ emissions plastic produces during its life cycle, we've discussed the external costs that fall on societies around the world. As mentioned before, the landmark [2021 WWF report](#) quantified the costs of emissions and plastic pollution in the fragile ecosystems and other externalities to be at roughly \$10 000 per tonne of plastic during its life cycle. This means that annually, Borealis costs societies around the world \$58 billion dollars in external costs attributable to plastics.

This is seven times as much as its yearly revenue, which means that if Borealis would be held accountable for the plastic it floods our streets with, there would be little left of the company. When we compare this cost to the [\\$132 million](#) Borealis paid in [income taxes in 2020](#), we can calculate that Borealis annually costs society 440 times more than it pays back.

Their sustainability strategy is threefold. The first two solutions have to do with their excessive use of fossil fuels: they will increase their use of renewable

energy and increase their energy efficiency. So while they don't have a concrete target to decrease their greenhouse gas emissions, these two goals would supposedly bring them closer to climate neutrality.

Their third solution concerns their products. While it is true that plastics are lightweight in transport, it seems quite a stretch to claim that plastic in its current form can [“contribute to the fight against climate change”](#). Calling for policy makers to put in place measures to incentivise the transition to a plastification of products to fight climate change seems more like a solution to boost their sales.

The main target in their sustainability strategy is greening their energy supply and getting 50% of their electricity from renewable sources by 2030. Besides displacing other uses of renewable energy, it's worth noting that in their annual report and general communication they suggest these targets to be for the entire global group, when [they are actually only valid for their European assets](#).

It must also be emphasised that electricity only provided [37% of Borealis' total energy consumption](#) in 2020, with fossil fuels providing the rest. This makes their bold target of 50% of renewable electricity only 18.5% of their total energy use, which is twice as bad as the European wide target of [32% by 2030](#). This doesn't stop Borealis from interchangeably using energy and electricity in their communication concerning their 50% goal, confusing the reader and making it seem like an ambitious goal for this energy intensive sector.

Their Circular Economy solutions aren't enough

Another important part in Borealis' sustainability strategy are their goals for the Circular Economy for 2025. Their first goal states they want to produce 350 000 tonnes of recycled polyolefin annually. Knowing that they made about 6 million tonnes of plastic in 2020, this goal for 2025 is only 6% of their annual production. This is still miles away from the European goal of 30% recycled content by 2030. Unless Borealis ramps up its recycled plastic production goals, this is a segment of the market lost to greener companies. And despite their promises regarding recycled plastics, they are expanding their virgin plastic facilities in Europe.

Their other goal regarding the Circular Economy is 100% of consumer products being recyclable, reusable or with renewable content. Borealis produces basic polymers and sells those to other companies to mix with additives, colourants, etc, to make their packaging or consumer goods. Besides the renewable content Borealis puts in their basic polymers, what their customers do with those polyolefins and how recyclable, reusable, and renewable they are, is beyond their control. Unless Borealis publishes the companies they supply to and broadens this target to their customers, this promise is not worth a lot.

Borealis realises the importance of the circular economy and has been expanding their own recycling capacities these last few years with its acquisitions of Mtm and Ecoplast recycling plants in Germany and Austria. However, with an annual capacity of 80 000 tonnes and 35 000 tonnes of plastics respectively, these are but a 2% drop in Borealis' plastic ocean.

Borealis is also setting its hopes on "chemical recycling" to turn plastic waste into fuel or base chemicals for the production of new plastics. Their ReOil plant in Austria recycles plastics into synthetic crude oil, which can be processed into plastics again. While this project has some potential to decrease CO2 emissions, it only accounts for 0.0017% of Borealis' production, with a yearly production of only 100 000 kg. Moreover, their new Swedish chemical recycling project won't commence operations until 2024. Unless Borealis seriously steps up their efforts to use recycled feedstocks, these investments are only a fig leaf for them to continue pumping out fossil fuel plastics.

Their most remarkable "success story" in their annual report however is their "Borealis Closes the Loop" Pilot Project, where they proudly announced the replacement of single-use cups with reusable cups in their Belgian facilities. This would save about 4 tonnes of plastic, or a whopping 0.00007% of their annual polyolefin production.

Business is booming: the brand new Kallo plastics factory in the Port of Antwerp

Growth of the plastic market in Europe is slowing, oversupply is already present, and several extra plastic factories are in the making. Nonetheless, Borealis is pushing through with the construction of their billion euro Kallo facility in the Port of Antwerp, expanding their current location. To be precise, what they will be building is a propane dehydrogenation plant. They have already delayed their operations by a year due to covid and will begin production in the third quarter of 2023. What this new mega plant will be doing is essentially converting fossil fuel propane gas into propylene, which is a base chemical for the plastic polypropylene. This means it's another plastics factory locking our future into decades more of plastic production.

They intend to produce about 750 000 tonnes of propylene per year, which is about a tenth of the total yearly European production. So when everything seems to point to a decreasing growth of plastics in Europe, they decide to quadruple their Kallo activities.

This billion euro investment into decades of new plastics is in line with Borealis' strategy to become the European market leader of polypropylene and propylene in Europe. It's their biggest investment ever made in Europe, and next to INEOS Project One, the most significant petrochemical investment in Europe these last 20 years.

While the new Borealis project is less contested than INEOS' Project One, the emissions and plastics it would unleash onto Belgium and Europe are catastrophic. Its nitrogen emissions would far exceed European legislation, in a country that is already the most nitrogen polluted in Europe. And they will be doing so with government money. About 6 million euro of our tax money will go to Borealis' plastics factory for them to import propane gas and turn it into new building blocks for plastics. It's noteworthy that Borealis made €600 million in profit in 2020 alone. It is not only these Belgian subsidies that were interesting for Borealis. The lack of an ambitious climate policy in Belgium makes Antwerp very attractive for big polluters such as Borealis, who stand to lose money if policy makers decide to take decisive action on plastic production.

Even though Borealis is proudly saying that their new facility will be modern and less polluting than older models, it's important to note that they will be expanding their current 30 year old Kallo plant, which is already producing 300 000 tonnes of polypropylene. The Kallo case is a perfect example of carbon lock-in where new technology, infrastructure, institutions and human behaviour will continue to strengthen our dependency on fossil fuels.

Banking on the plastic soup

Borealis is an essential link in the plastic chain. With their ambition to become the largest plastic producer in Europe, they are planning to expand their operations on a large scale. While they made about 6 million tonnes of plastic in 2020, we can be assured that this number will be significantly larger in the coming years. They are currently expanding their Kallo facilities in Belgium, which will be operational in 2023 and produce a million tonnes per year. Simultaneously they have built [a new state-of-the-art million tonne-a-year cracker in Texas, USA](#), through their Baystar joint venture with TotalEnergies. Furthermore, in 2021 they announced an expansion of their massive Borouge facilities in the United Arab Emirates, which is already [the largest polyfin plastic facility in the world](#).

As we discussed earlier in our report, big fossil fuel companies are counting on the rise of plastics as a plan B for the inevitable decline of demand in fossil fuels. This is the same logic Borealis was founded on back in 1994, and it's still true today in 2022. So when looking into their financing, we will also be looking at Borealis' parent company, the Austrian fossil fuel giant OMV. Since 2020, they own [75% of Borealis' shares](#), and the links between the two groups are deep. While Borealis' contribution of 314 million euros to OMV was only 8.88% of its 2019 Operating Result, their contribution [rose to 26%](#) in 2020. Not only was the €3.9 billion 2020 Borealis acquisition the biggest in OMV's history, it allowed

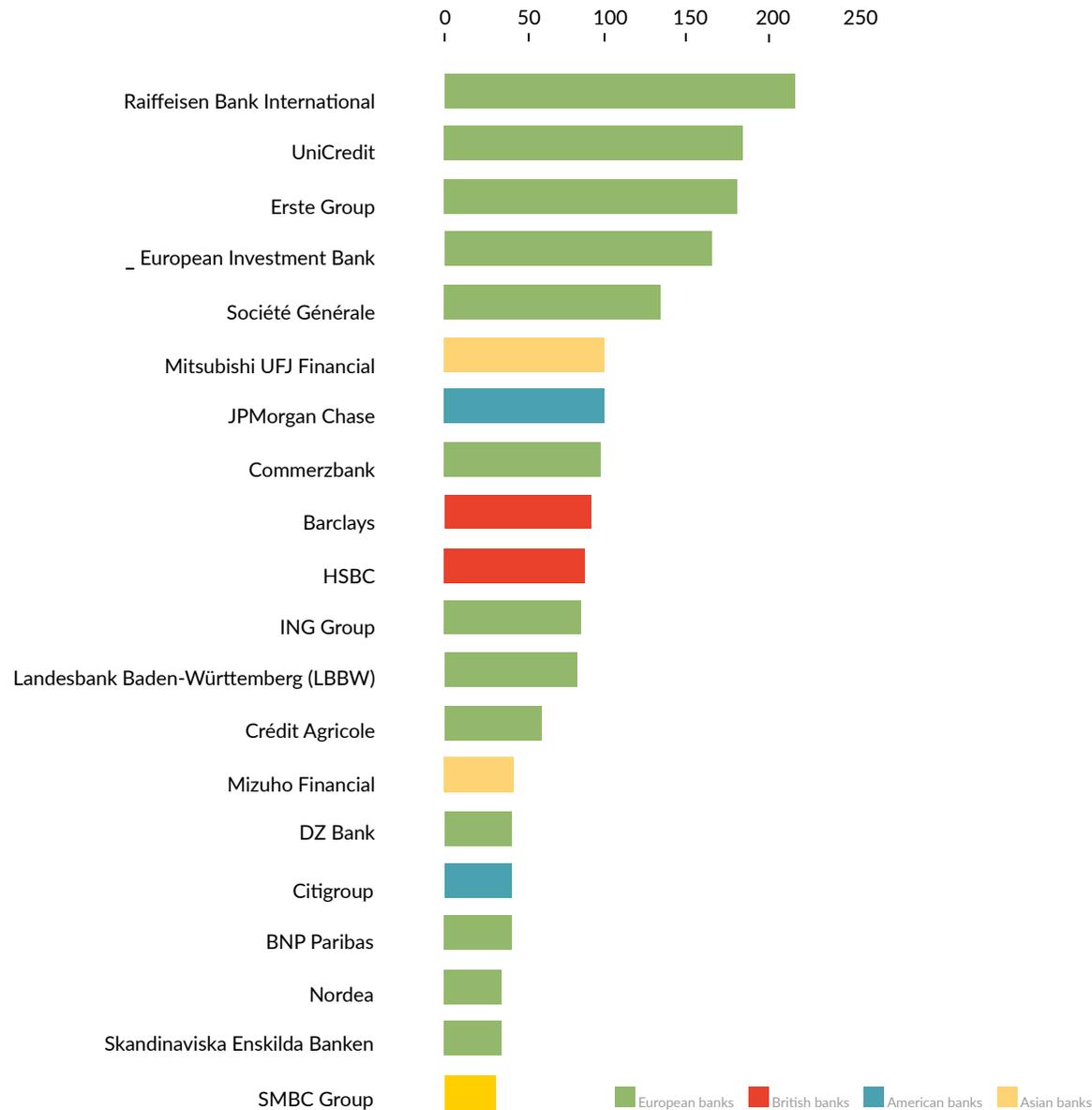
OMV to [expand their assets by a quarter](#) in just one year. To fund this acquisition, OMV issued [1.75 billion euros in bonds](#) and sold 2 billion euros in assets. Incidentally, the CEO of OMV since the acquisition, Alfred Stern, was [the previous CEO of Borealis](#).

When reading [OMV's annual report](#) they acknowledge that, in Europe, we're nearing an era of decline for fossil fuels in energy and transport, and they see plastics and petrochemicals as a Plan B for the classic fossil fuel industry. Instead of the radical change we need to keep global warming under 1.5° C, they are counting on plastics to ramp up their fossil production, which they see as future driven petrochemicals instead of just fossil fuels. OMV said in 2020 that Borealis was the base for [a low-carbon OMV future](#). However, in OMV's 30% emissions reduction target for 2025, [they explicitly exclude Borealis' pollution](#).

It's clear that Borealis and OMV are going full throttle towards decades more of plastic production, while the rest of the world is steadily waking up to the global threat of plastics. It's important to realise that the banks are the crucial actors in this story. Without the financing of the banks, it becomes a lot harder to keep building these industrial mastodons. The reason why they keep funding Borealis, INEOS, and other plastic polluters is obvious: they believe that there's money to be made in plastics. All the while, societies around the world are suffering from the external costs associated with plastic, annually costing ten times as much as the entire plastics

market. The profits are privatised while the plastic costs are socialised.

Top 20 banks financing Borealis between 2016 and 2021, credit and bonds, in EUR million



On the left you can see the loans and underwriting of bonds provided to Borealis and OMV by their top 20 financiers. Just as with INEOS, we have adjusted the credits and underwritings of bonds to Borealis according to their activities ascribed to plastics. Just like INEOS, Borealis and OMV remain vague and untransparent on the use of proceeds of these loans. With OMV speaking out on Borealis being the future for OMV, receiving revenue from and investing in Borealis, and issuing bonds for the Borealis acquisition, it's important to include their financing too. In total we found 1.9 billion euros in credit and underwriting and 199 million euros in bond and shareholding attributable to plastics between 2016 and 2021.

As mentioned before, Borealis' financing has been adjusted for 64% regarding their plastics production. In total, we have found 2152 million euros in financing towards Borealis between 2016 and October 2021, to fund their rapid expansion of plastic production. And this gamble will have to pay off. In the next two years, they will have to pay back 1 billion euros in credits and bonds, which is [1/7th of their revenue in 2020](#) and [twice their profit that year](#).

With Borealis' roots in Scandinavia and Austria, we can see a completely different financing pattern than in INEOS' case. Instead of the UK-USA money pouring into plastics production, it's mostly European money, with Austrian, Italian, and French bankers taking up the top 5. While only a few banks active in Belgium appear in Borealis' top 20 creditors and underwriters of bonds, ING Group and BNP Paribas respectively still have €82 million and €39 million in credits attributable to Borealis' plastic.

A notable credit is [a 250 million euro loan to Borealis](#) in 2020 provided by the EU's European Investment Bank (EIB), to fund Borealis' research and development into the circular economy. But as we've seen in the previous parts, there's lots to be said about Borealis' vision of the circular economy. The EIB conditions for this loan are not ambitious enough for a path towards a true circular economy. Replacing our plastic mountain by greener or recycled plastic is not a sustainable solution. In the long term, considering our carbon budget and fossil fuel reserves, what we will need is less plastics.

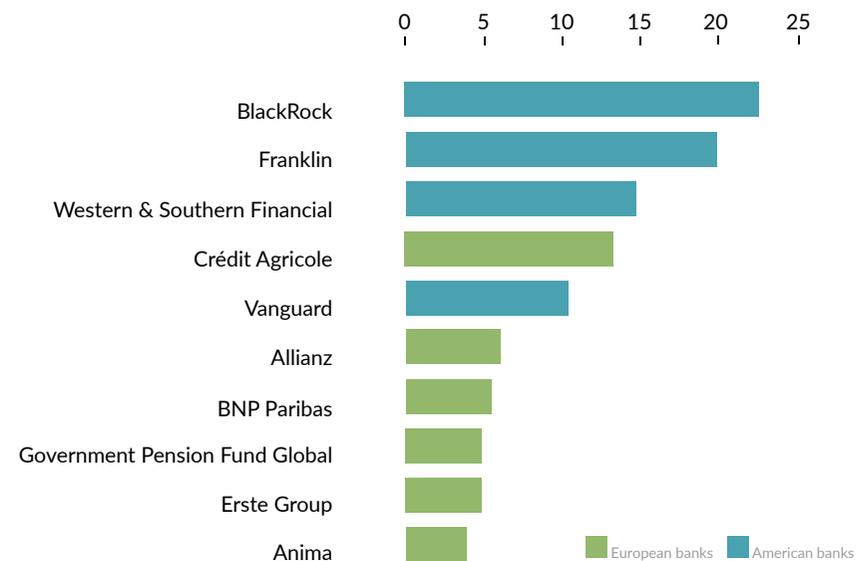
On the right you can see the top 10 bonds and shareholders for Borealis and OMV attributable to plastics. Of the top 40 investors, half of them are asset managers and a quarter are insurance companies. It should not surprise that BlackRock is the largest investor in Borealis. [With 10 000 billion dollars in assets](#) they are by far the largest asset manager in the world, and half as big as the entire US economy by GDP. These kinds of numbers give companies like BlackRock an enormous power in the green transition. Continuing to fund polluting industries like plastic production is not only ethically a problem,

but it's also a financial risk. In the long term, there is no other option than to consume less plastic and fossil fuels. This will hurt the assets of pension funds, savings accounts and institutions with money in firms like BlackRock.

While most transactions and financing were vague, some transactions caught our attention. The Norwegian Pension fund, the world's largest sovereign wealth fund, [announced in 2019 that they would cease their investments in fossil fuels](#). Barely a year later however, they purchased 150 million euros worth of OMV shares.

Another notable bond issue was a 53 million euro bond bought by the asset managers Franklin Resources and Western & Southern Financial in 2021, issued by [Borealis Funding Company Limited](#). We tracked it down to a post box in the corporate tax haven of Isle of Man. While not as blatant as INEOS, Borealis wants to keep up good appearances in public, but avoids paying taxes in private.

Top 10 share and bondholders of Borealis and OMV, between 2016 and 2021, in EUR million



4. The role of banks active in Belgium

INEOS and Borealis

When discussing the financing of INEOS and Borealis we mostly notice the big American or UK banks. But since both INEOS and Borealis have important activities in Belgium, and both are expanding their Port of Antwerp operations on a substantial scale, it's hard to ignore the banks active in Belgium financing decades of future plastic production. Between 2016 and 2021, banks active in Belgium financed INEOS and Borealis with a total of about 3 billion euros in credits and investments in plastics, with the lion share going to INEOS.

	INEOS			Borealis			
Banks active in Belgium	Credits	Investments	Total INEOS	Credits	Investments	Total Borealis	Total
ING Group	905	/	905	82	/	82	987
Deutsche Bank	856	48	904	/	3	3	907
BNP Paribas	751	16	767	39	5	44	811
KBC Group	93	/	93	/	0.39	0.39	93
AXA	/	51	51	/	1.7	1.7	52.7
Candriam / Belfius	/	22	22	/	2.6	2.6	24.6
Banque Degroof Petercam	/	13	13	/	1.7	1.7	14.7
						Total	2890

Investments and credits of banks active in Belgium in INEOS and Borealis between 2016 and 2021, in EUR million

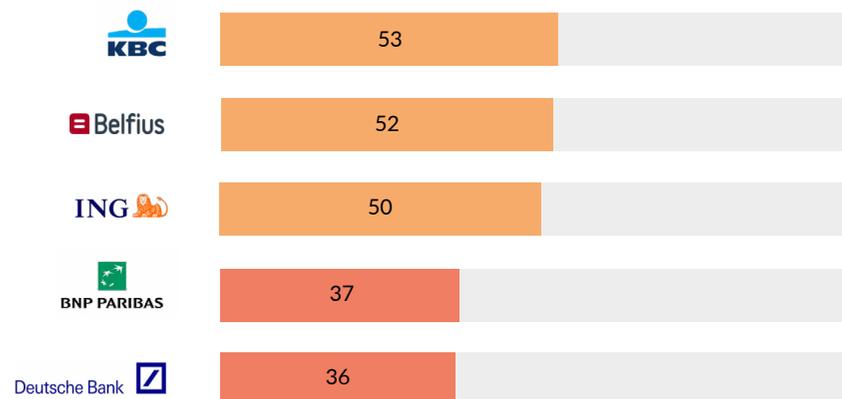
On the left we can see how much money the banks active in Belgium are pouring into INEOS' and Borealis' plastic production. By far the largest piece of the pie is going to INEOS, with credit of 2.6 billion euros going into plastic production. Investments in the form of bond- and shareholdings are limited in both companies. ING Group, BNP Paribas, and Deutsche Bank have the largest exposure, which is not surprising as they have a larger balance sheet in comparison to the others.

The data found for Belfius are by Candriam, and not direct investments of Belfius themselves. When Dexia defaulted due to the global financial crisis in 2011, its banking activities were split into Belfius, and [Dexia Asset Management was sold to the US asset manager New York Life Investments and re-named Candriam](#). Nonetheless, Belfius continues to offer Candriam's funds to its clients. Due to the unique nature of their [history and partnership](#), we have included them into our research. Not all of the investments made by Candriam can be attributed to clients of Belfius who have bought Candriam's investment funds. But there is no detailed information which gives a breakdown of the proportion of Belfius clients' investments into Candriam's funds.

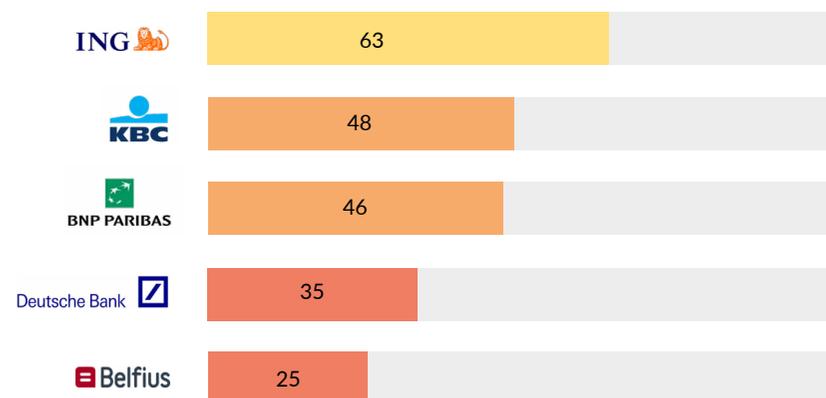
What are banks saying about their plastic investments?

In [our 2021 report on single-use plastics in the food industry](#), we already took a closer look at the banks' policies on plastic, or lack thereof. Since then there has been little improvement and it seems like the petrochemical sector suffers the same lack of attention from banks. Being the largest industrial energy user and third largest greenhouse gases emitter, this is an especially dangerous blind spot of the financial system. All of them have policies on oil & gas companies, which makes it especially odd that they do not have concrete policies on the petrochemical sector, a large user of fossil fuels and fossil energy. Unless they are gambling on plastic as a plan B for fossil fuels.

In March 2022 FairFin published [an update to its BankWijzer](#), where we take a closer look at the myriad of policies proposed by banks active in Belgium. With plastic pollution lacking in all of their current policies, but having a serious impact on both climate and nature, these scores can give a general impression into the discussed banks' performance regarding climate and nature.



Climate policy of the banks, *rated for BankWijzer*



Nature policy of the banks, *rated for BankWijzer*



ING Group

As seen above, ING scores best regarding their nature policy, but barely passes for their climate policy. The Dutch banking group is in 17th place worldwide in bankrolling plastic production according to the [Plastic Waste Makers Index](#). In [their 2021 Environmental Social Risk Framework](#) they devoted an entire section to chemicals, and while they acknowledge the danger of microplastics in our waters, a concrete plastic policy is missing. That being said, of all the reviewed banks, they are the only one with [some sort of plastic strategy](#).



Deutsche Bank

With the lowest score on climate, and 2nd lowest on their nature policy, it's not surprising that the Frankfurt giant lacks a plastic policy. While acknowledging [that investing in the circular economy will be profitable](#), they remain 7th place worldwide on [the Plastic Makers Waste Index](#). And even worse: plastics manufacturing is being considered as an environmentally sustainable activity in their [Sustainable Finance Framework](#). While it is true that the new Borealis and INEOS plastic facilities will be less carbon intensive than their decades older counterparts, it will not make the plastic mountain smaller.



BNP Paribas

While BNP seems to acknowledge plastic as a waste issue and a risk in their [statements on the protection of the ocean](#) and [biodiversity](#), as one of the world largest fossil fuel financiers, BNP is also a heavy bankroller of plastic waste. While publicly supporting the [Ellen MacArthur Foundation](#) on circular economy, they currently occupy [the global 12th place](#) financing INEOS and other plastic producers, profiting considerably from the plastic crisis. One of the BNP Paribas managers announced, [in the 2021 "Great Shift" debate](#) that FairFin took part in, that [BNP would no longer be using single-use cups in their offices](#), yet they still have no policies that tackle the full scale of the plastic crisis.



KBC Group

While plastic is absent in the current policies of KBC, they are the only ones who changed their stance on plastic since our previous report. In [their 2021 sustainability report](#) they analysed certain sectors most vulnerable to the low-carbon transition: among these sectors are the food and industry, and chemical sector. While far from a real plastic policy, they are publicly acknowledging that plastic is a climate, environmental, and financial risk that banks should take into account through customer engagement and data collection.



Belfius

While Belfius is a state owned bank, and should lead the way by example, we did not find any commitment regarding the plastic crisis in their public documents. Moreover, regarding their nature policy, Belfius is by far the worst bank active in Belgium. This is simply because they do not have a concrete nature policy, contrary to their asset manager partner Candriam. They not only acknowledge the risk of plastic waste to the environment, but also see that [plastic producers might face a decrease in demand due to regulation and action around the plastic crisis](#). Nonetheless, even knowing these risks, all the investments we found for Candriam were bought after they published their plastic article saying how big of a risk plastic investments pose.

Plastic expansion is not an option if we want to stay within 1.5° C

Every stage of the plastic process has a heavy impact on our planet. From the extraction of the feedstocks, the energy intensive petrochemical industry, the disposal at the end of its lifecycle and the emissions due to the fossil fuels that power the entire operation, carbon is being emitted at every point. All the while, the effects of accelerating climate change are already irreversible and the agreed-upon targets of limiting global warming to 1.5 or 2 degrees Celsius are rapidly becoming impossible. We must act immediately if we want to avoid [a point of no return](#). After then, large-scale climatic changes will very definitely be unavoidable and irreversible, meaning that we don't have time to spare.

That's why banks need to deepen their policies now. There's a discrepancy between their stance on plastic in our dialogues, and their policies. They say that they take plastic pollution and the pollution caused by plastic production very seriously, but this is not reflected in their policies.

Because of this blind spot, they keep pouring money into the energy intensive, heavily polluting petrochemical industry. Right now this industry is producing [360 million tonnes of virgin plastics](#) each year and still growing. Under the current growth scenarios, the plastic production industry plans to double its emissions in the coming decades. This would account for [19% of our remaining carbon budget for 2050](#). At the same time, there are major economic risks associated with investing in plastic

production. There is already a global overproduction of plastic, and legislation and rules will restrict its use even more.

That's why FairFin took a closer look at the Belgian banks that are financing decades more of plastic manufacture. Between 2016 and 2021, Belgian banks have already financed the chemical firms INEOS and Borealis with nearly 3 billion euros. While [Antwerp is already the world's plastic capital](#), INEOS is planning a new plastic project in the Port of Antwerp and Borealis is building one right now. These facilities will be producing building blocks for plastics that are already oversupplied on the European market.

The production of these building blocks is very polluting for the environment and the climate, contrary to what these companies are saying. The projects don't even fit the sustainable strategies of [INEOS](#) and [Borealis](#) themselves, nor those of the [Flemish government](#). A 2021 research showed that [if we want to mitigate the worst effects of plastic pollution, we will have to phase out all production of virgin plastics by 2040](#). But if Project One gets built, it plans to stay in production until 2060. This means they will be making building blocks for plastic for 40 more years, while using polluting fossil fuel as feedstock, in an ethane cracker that consumes an enormous amount of energy.

PMV, the Flemish government's investment fund, has granted a guarantee of between 250 and 500 million euros to Project One. As a result, the Flemish

taxpayer is taking a significant part of this project's risk. INEOS has already reduced Project One by half last year. What was triumphantly announced a few years ago [as the largest petrochemical investment in Europe in the last 20 years](#), threatens to be a big cost to the Flemish taxpayer.

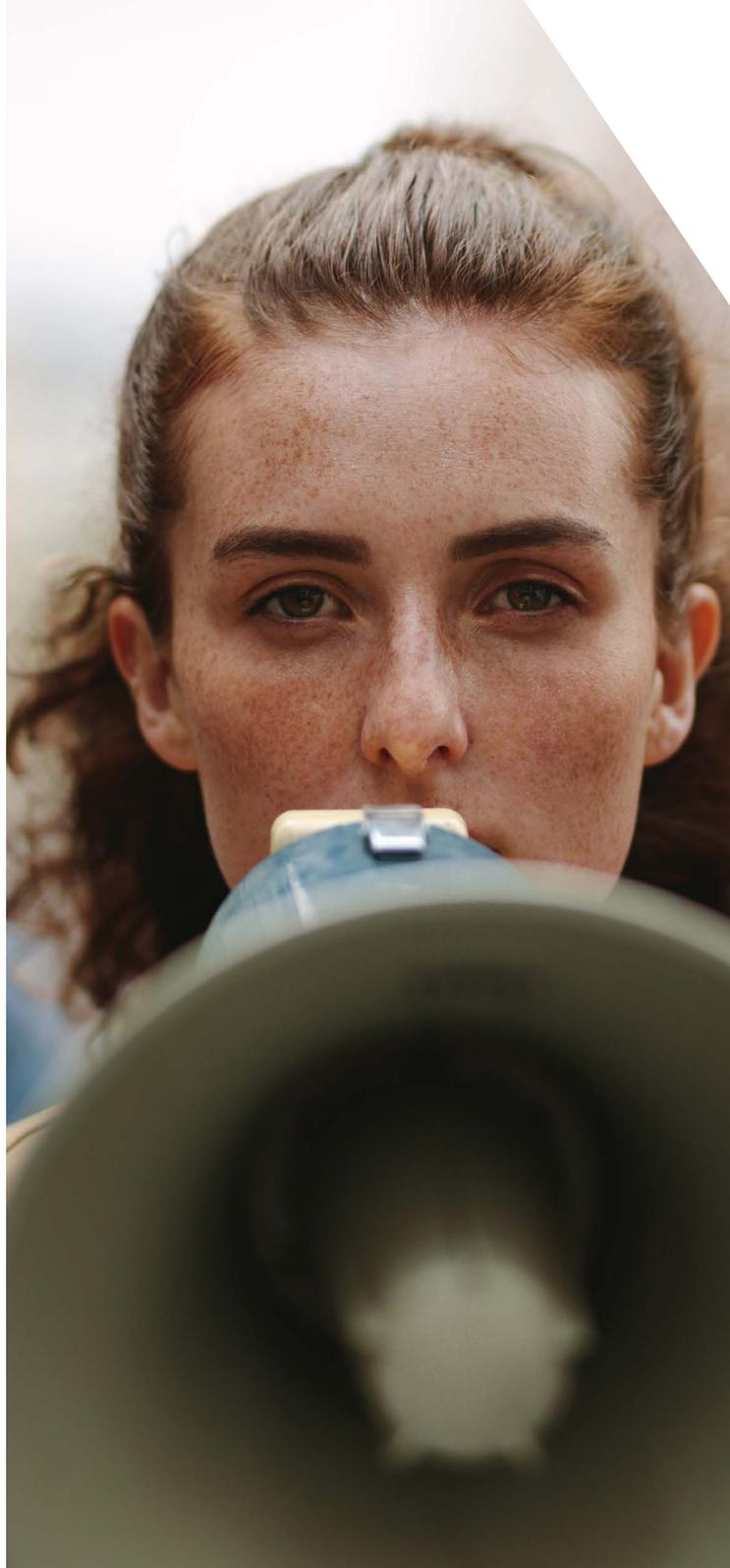
Our demands towards the banks and the financial institutions making new plastic facilities possible are clear. If we want to take action to combat climate change we can't allow plastic production to be expanded.

We therefore demand of banks that they exclude companies that build new plastic producing facilities in their investment and credit policies. There is no place for these new fossil fuel colossuses [in the circular economy the European Green Deal envisions](#).

When it comes to policy makers, we ask the Federal Ministry of Finance to take up an active role as the largest shareholder of BNP Paribas and full owner of Belfius, and to use their funds to finance the green transition instead of [the bottomless pit of Project One](#). Together these two banks financed INEOS and Borealis with 835 million euros between 2016 and 2021.

We call on the Flemish Ministry of Economy to reconsider the guarantee that was given to Project One. It's unacceptable that this environmental and economic risk will fall on the Flemish taxpayer, while profits will go to INEOS and its investors. We therefore call on all members of parliament to stand with us and demand the same from our politicians.

FairFin is launching [a letter of complaint](#) with which concerned Belgian citizens can address their banks about these harmful practices.



About FairFin

FairFin strives for a world where people and the planet come first. Money plays a major role in this. Because there is a lot of money in the world, we can activate it for the benefit of people and the planet. But today, behind the scenes, a handful of shareholders determine the rules of the game: to make a quick profit by sacrificing everything else. Things can be different: fairer, more transparent and more democratic. A new financial system that is transparent, fair and democratic can be a lever for a social and sustainable world. In order to change the rules of the game from the bottom up, FairFin conducts research and campaigns. We do not do this alone. To guarantee our operation and independence, we rely on our supporters. People support us by committing themselves as a volunteer, as a supporter or by spreading our campaigns. Find out how you can help us stand up for a better financial system on www.fairfin.be.

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