### PARIS or PREEM

# Swedish Prime minister Stefan Löfven must choose Paris over Preem

The Swedish government is about to decide on an application from the Preem oil company to expand their oil refinery in Lysekil. If the Swedish government grants Preem permission to expand, it will increase the CO2 emissions from Preemraff by one million tonnes per year and make the refinery the single biggest source of CO2 in the country. An expansion of Preemraff is incompatible with Sweden reaching its national emissions targets, its commitments to the Paris Agreement and would undermine the government's position when advocating for increased climate ambition in the EU, which is crucial in global climate negotiations. <sup>2</sup>

Preem's oil refinery in Lysekil wants to invest 15 billion SEK (1,5 billion Euros) in technology that makes it profitable to continue refining dirty, heavy fuel oil, mainly from sulfur-rich oil fields. Increased environmental regulations for marine fuels have made the dirtiest part of crude oil difficult for Preem to sell. Therefore, Preem wants to start refining it into petrol and diesel, which would require large amounts of energy, lock us into more fossil fuel infrastructure and works against the transition to a sustainable society. Emissions of sulfur dioxide into the air is estimated to double.<sup>3</sup> Discharges to the marine environment and noise pollution would increase. Additionally, resting places for the red-listed, Natterer's bat, would be damaged or disappear.

Preem's new technology will use natural gas to extract hydrogen, which is then used to separate (hydro-crack) heavy fuel oil into petrol and diesel. If the refinery is allowed to expand, carbon dioxide emissions would increase by 1 million tonnes to 2.7 million tonnes per year. The increase of 1 million tonnes of CO2 only applies to the increased emissions that would arise from the refinery itself, not the emissions that occur when the fuel is later used. Preem's own assessment is that the fuels that the company produces at its refineries today cause emissions of around 50 million tonnes of CO2 per year in the entire value chain.

The expansion of the refinery would also lead to increased emissions of sulphur oxides, from an average value of 239 tonnes per year (2010-2016) to 800 tonnes per year. Emissions of nitrogen oxides are estimated to increase from 574 to 750 tonnes per year, and emissions of volatile organic compounds increase from 3455 tonnes to 4150 tonnes per year. Preem's expansion could therefore potentially increase ourt exposure to sulphur to five times higher than the limit set by the WHO, which would be harmful for asthmatics.

Preem reports much lower levels of emissions of nitrogen oxides than the municipality reports, which shows higher values by many times.<sup>5</sup> There are also shortcomings in the reporting of background content, reference levels and the local emissions from the increasing number of large vessels that will arrive at Preem's port following an expansion.

A study by Occupational and Environmental Medicine in Gothenburg on

leukemia disease cases around Preem has shown more than doubled the incidents compared with the expected outcome. In a follow-up, the total increase was 40 percent. The prevalence of leukemia in Lysekil was normal before the refinery started. Another study from the University of Gothenburg documented a doubled risk of leukemia among Preem's staff. Current data from Lysekil also shows a 12-14 percent increased mortality in general among the municipality's population aged 20-65 years.<sup>6</sup>



Oil spill from tanker in Mauritius.

#### Renewable = sustainable?

There is nothing in Preems application that legally binds Preem to increase its share of so-called renewable fuels. The application for expansion is about fossil fuels and how much renewable fuel the new plant in Lysekil can produce is uncertain. It is even more uncertain how sustainable these fuels will be. What is named "renewable" is in practice slaughterhouse waste and forests. Today, large-scale Swedish forestry is based on clear cutting with few trees left behind. The trees are then re-planted very densely, which requires clearing and thinning before they are finally felled after 60–100 years. This means that trees that are felled and burned today release carbon



dioxide, but only around the year 2100 has it been bound into new trees. The industry claims that Sweden has more forest than ever and that it is growing faster than it is harvested. They miss that intact ecosystems - real forest, binds carbon dioxide better and more sustainably. Much of what people believe are forests, are vulnerable plantations depleted of their biodiversity.

#### Preem uses CCS as an alibi for continued emissions

Preem claims that they intend to capture some of the increased carbon dioxide emissions and store them in the bedrock under the sea outside Norway. There are many uncertainties about the CCS technology<sup>8</sup> that have not yet been used on a large scale.<sup>9</sup> It is currently not legal as there are agreements that protect both the North Sea and the Baltic Sea from waste dumping.<sup>10</sup> Preem also admit that they will only apply CCS if there are financial, technical and legal possibilities. At present, all three are missing.

## Preem uses emissions trading within the EU as an argument to be able to expand its fossil fuel operations

Preem's refineries are part of the European Emissions Trading System (EU ETS). The aim of the system is to ensure that the EU achieves its emission targets in a cost-effective way and to mobilize investments in energy-efficiency and renewable technologies. Despite this, ETS is used as an argument as to why Sweden could not deny an expansion of Preemraff.

Sweden is subject to EU treaties - the main one being the "Treaty on the Functioning of the European Union", which clearly states that member states may go further in their environmental legislation than mutual agreement amongst states. EU environmental law should not "prevent any Member State from maintaining or introducing more stringent or protective measures". 11 Each member state has the right to decide on its own energy mix: "The conditions for the use of its energy sources, its choice between different energy sources or the general structure of energy supply". 12 The government therfore has every opportunity to say no to an expansion of Preem's oil refinery.

In 2018, Preem received free emission rights worth 35 million euro. In 2019, they received free emission rights worth approximately 413 million SEK. As Preem is part of the EU's emissions trading system, they also do not pay carbon dioxide tax in Sweden,<sup>13</sup> but are expected to pay for their emissions through emission rights.

The emissions from Preem's new facility will probably be booked within the system's reserve for new facilities, New Entrants Reserve (NER).<sup>14</sup> They are then taken from a pot for surplus emission rights that would have been canceled after 2030. Thus, Preem's emissions would not decrease, but on the contrary, increase the total of emissions in the EU. Almost 2/3 of the reserves in the New entrants reserve are unused<sup>15</sup> and are thus transferred to the 2021-2030 period. If they were not used, they would instead have disappeared from the emissions system.

Preem has also received a large discount on the emission rights they were forced to buy. Preem applied for, and was granted, free emission rights for 92.7 percent of its greenhouse gas emissions in 2018 for the Lysekil refinery. In 2017, Preem received a free dividend for 97 percent of emissions. This means that Preem hardly has to pay anything for its emissions. In 2005, Preem gained access to more emission rights than they then emitted,

which means that the company was able to increase emissions, and its refinery operations, without it costing them anything. According to Preem's annual report, the company also expects to receive free emission rights for the refinery operations during the trading period 2021–2030. According to the EU system for emitting countries, industries can receive free emission rights if they are considered to be in the risk zone for competition from industries outside the EU that do not have to pay for emissions. In practice, it is thus difficult to see that the emissions trading system has any significant controlling effect on the plant.

That Preem is one of Sweden's largest emitters - and will be the absolute largest - thus costs almost nothing. 16 Preem also receives subsidies from the state in the form of exemptions from the energy tax. This is a sum that is estimated to be worth 15 million SEK.



Woman protesting against Preem expansion with the sign "The jobs of the future are fossil free".

### "If we do not do it, someone else will"

It is claimed that if the oil is not refined in Sweden, someone else will do it, albeit with worse technology. That's not true. Many refineries are struggling with weak profitability and are now investing in technology to get more products out of oil and heavy fuel oil. The planned expansion of Preemraff is adapted for dirty oils with a high sulphur content. Increasing the capacity to refine oil in our region also increases the profitability of extracting oil in our region. If a demand is created for oil with a higher sulphur content that can be refined, more oil sources with dirty oil will be made more profitable. This is about extracting more oil in sensitive areas, not about closing down refineries in Europe. On the contrary, everyone else does. During the last five years, more has been invested in refining capacity than the demand for their products.

Greenhouse gas emissions can never be national, they are always global as the atmosphere knows no boundaries. Therefore, it is necessary for all countries to do their utmost to reduce their emissions. Then it is not possible to justify an expansion of a business that would increase Sweden's emissions by 1 million tonnes per year.

### Massive greenwashing, ongoing supervisory case

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In June, Greenpeace presented a review<sup>17</sup> which shows that Preem spent at least 8 million SEK on buying ads and advertorials in the news media in an

attempt to highlight its fossil expansion as something positive for the climate. Some of the company's so-called "native advertisements", which can easily be confused with the newspapers' editorial articles, have already been condemned by the Advertising Ombudsman (Reklamombudsmannen) for being misleading. 18 Greenpeace has reported Preem to the Consumer Ombudsman (Konsumentombudsmannen), who has now started a supervisory case to rereview their commercials.



Preem spokesperson had a hard time explaining the claims in their greenwashing campaign.

# Oil refineries do not create sustainable jobs

A report by the United Nations International Labor Organization (ILO)<sup>19</sup> shows that 6 million jobs will be lost in the fossil fuel industry, while 24 million jobs will be created in the green transition. In Denmark, the state has invested in a Future Fund that is estimated to provide up to 100,000 new jobs.<sup>20</sup> The Danish trade union 3F, the largest trade union within LO, estimates the number of jobs at 6,700 within 3F over a five-year period when establishing a more climate-friendly energy supply. <sup>21</sup>

### The permit process

Since 2018, there has been a legal process where the Swedish Society for Nature Conservation (Naturskyddsföreningen) has appealed the expansion, which has been tried in accordance with current environmental legislation.<sup>22</sup> In June 2020, the Supreme Land and Environmental Court chose to interpret the Environmental Code as meaning that they could not refuse an extension - despite the fact that the facility would be contrary to the environmental goal "limited climate impact" and the Code's portal clause stipulating that "the Environmental Code and future generations are assured of a healthy and good environment". The decision is now on the government's table, where analysts at the Ministry of the Environment are investigating the matter further. Notice is expected before the end of the year, but may also take years.

### Stefan Löfven must say no to Preem

The Swedish parliament has decided that emissions from operations within Swedish territory must decrease by at least 85 percent lower than 1990 levels by 2045. In the scenarios based on policy instruments decided today, the total Swedish emissions of greenhouse gases in 2045 are estimated to be 34–37 percent lower than in 1990, which means an emissions gap to the target of 31-36 million tonnes by 2045. <sup>23</sup>

The government must say no to an expansion of Preem's oil refinery in Lysekil and instead chose to invest in the transition to a sustainable society without fossil fuels. Oil is no longer a foundation for our welfare and well-being - it is a threat. The time of the internal combustion engine is over.

### **Footnotes and sources**



- 1. http://utslappisiffror.naturvardsverket.se/Sok/Lista-over-utslapp-per-anlaggning/?sid=128&limit=1000000000-m
- 2. Sweden right now has an emissions gap to the target of 31-36 million tonnes by 2045. Adding 1 million ton in production leading to 4.5-5.5 million ton in scope 3 (used by consumer), this would take Sweden even further away from reaching its commitments. Read more here: http://www.naturvardsverket.se/klimatmal
- 3. See page 38 in case nr M 4708-16. https://www.naturvardsverket.se/upload/stod-i-miljoar-betet/rattsfall/IED-avgoranden/2018/2018-11-09-mmd-vanersborg.pdf
- 4. See p. 40 i mark- och miljödomstolens dom, mål nr M 4708-16. https://www.naturvardsverket.se/upload/stod-i-miljoar-betet/rattsfall/IED-avgoranden/2018/2018-11-09mmd-vanersborg.pdf
- 5. https://www.gp.se/debatt/l%C3%B6fven-stoppa-preem-ut-sl%C3%A4ppen-%C3%B6kar-cancerrisken-kraftigt-1.33331613
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- 7. Read more in the written submission by the Swedish Environmental Protection Agency: https://www.naturvardsver-ket.se/upload/stod-i-miljoar-

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- 8. https://www.etc.se/klimat/osakert-om-ccs-tekniken-fungerar-ett-gigantiskt-science-fiction-projekt
- 9. SR Klotet "Osäkra klimatlöften om Preemraff" (Swedish radio) https://sverigesradio.se/avsnitt/1511600
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- 11. Article 194 (2), TFEU: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12012E194
- 12. Article 192(2)(c), TFEU: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12012E192
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- 17. www.greenwashing.se
- 18. https://www.bohuslaningen.se/nyheter/lysekil/preem-annonser-f%C3%A4lls-av-reklamombudsmannen-1.27730305
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