

# European emissions system determines meeting the agreed CO<sub>2</sub> targets, fossil subsidies secondary

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## Abstract

Many pleas for abolishing fossil subsidies fail to recognize the existence of the European Emissions Trading System: it ensures that we meet CO<sub>2</sub> targets even before 2040. Fossil subsidies do nothing to change that, while abolishing them could harm the competitive position of Dutch companies. In brief:

- Many of the companies that receive fossil subsidies (will) be covered by the trading system.
- The emissions ceiling will drop sharply from 2024, meaning that companies will probably have to be climate neutral before 2040.
- Fairness considerations may well be a reason to phase out fossil subsidies, provided all the pros and cons are taken into account.

## Introduction

The view that greenhouse gas emissions must be rapidly reduced to zero is increasingly shared, but there is still much debate about how to achieve this. Currently, we see pleas in the Netherlands to abolish so-called fossil subsidies (Samenom, 2023). These subsidies are mainly about tax rebates (Box 1). Many seem to agree that abolishing these subsidies is a crucial means of reducing emissions of CO<sub>2</sub> and other greenhouse gases. Many are surprised that

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something like fossil subsidies still exist at all, even though the urgency of the climate issue is becoming increasingly clear to everyone.

It is striking that in all these pleas for abolishing fossil subsidies, there is almost no mention of the existence of the European Union Emissions Trading System (EU ETS), with the exception of a few recent articles in *De Volkskrant*, including Beers and Van den Bergh (2023). If the EU ETS comes up at all in the pleas against fossil subsidies, it is often in a side sentence, saying that there is also such a thing as a 'carbon price', or that the EU ETS also provides fossil subsidies in the form of providing emission rights for free (SOMO, 2023). For example, in a recent ESB blog, a large number of university economists adamantly claim that fossil subsidies are holding back the transition to a 'new sustainable economy', without paying any attention to the existence of the EU ETS, or acknowledging that abolishing subsidies could potentially be ineffective due to interactions with the EU ETS (Van Wijnbergen et al., 2023). Even in the passage on fossil subsidies in the Dutch government's Budget Memorandum, the EU ETS comes off poorly, even though it does indicate that a large part of the subsidies goes to activities that are also covered by the EU ETS.

This limited focus on the EU ETS is notable because the trading system is an essential element of European climate policy, not only ensuring effective reductions in emissions of CO<sub>2</sub> and other greenhouse gases from a wide range of economic activities, but also influencing the effectiveness and efficiency of other climate policies, such as phasing out fossil subsidies.

#### **Box 1: Fossil subsidies and EU ETS**

Fossil subsidies largely consist of tax exemptions and tax rebates (MinFin, 2023). These tax breaks were introduced in the past mainly to prevent a competitive disadvantage for companies operating in international markets, but there are also benefits for small companies and households. The 2023 Budget Memorandum estimates the total amount of fossil subsidies at 40 to 45 billion euros (MinFin, 2023). Most of these subsidies will go to companies already covered by the EU ETS, as also indicated in the Budget Memorandum. They include:

- 10 billion for lower taxes in electricity generation. This will benefit large consumers of electricity, such as the Dutch Railways;
- 1 billion for VAT exemptions for aviation and cruises: aviation within Europe is already covered by the EU ETS;
- 3.5 billion for free emission rights to be phased out in the coming years.

Other fossil subsidies go to sectors that will soon be largely covered by European emissions trading (Kotzampasakis, 2022):

- 6 billion in excise tax rebates on fuel use in transport (road transport, aviation and shipping each benefit to a similar extent);
- 2 billion in other transport tax breaks, including rebates for all kinds of transport such as fire engines, disabled and wheelchair vehicles, hearses and motorhomes.

Outside the EU ETS there are fossil subsidies for households and small businesses, in the form of tax relief on energy bills (some €4 billion) and the price cap (3-4 billion).

The 14 billion for excise duty exemptions on the so-called non-energy use of fossil fuels (such as the production of plastics and medicines) are only partially covered by the EU ETS: the

direct emissions (scope 1) of this production are covered, but the indirect emissions due to the use of electricity or heat (scope 2) and emissions from the use of the products (scope 3) are not.

## Cap on emissions of more and more sectors

The EU ETS is a cornerstone of European climate policy, with binding agreements on how it will operate, even after 2030. The essential characteristic of the EU ETS is that there is a cap on total emissions for participating companies in the EU ETS area: the EU countries plus Norway, Iceland and Liechtenstein. This emissions cap decreases over time, and is translated by the EU into emission allowances. Participating companies need these allowances to emit not only CO<sub>2</sub>, but also N<sub>2</sub>O (nitrous oxide) and PFCs (fluorine). The emission rights are partly put on the market by the governments of these countries through auctions, and partly allocated for free to industry deemed vulnerable to CO<sub>2</sub> leakage effects. Participating companies must subsequently surrender an emission allowance to the emissions authorities for each ton of emissions each year. Violation by emitting more than one has in emission allowances is punished with high fines.

For the impact on climate change, it does not matter whether allowances are put on the market by auction or distributed for free. The climate impact is only determined by the total amount of allowances made available by the EU: even companies that get allowances for free cannot emit more than they have in allowances. Participating companies can also trade emission rights: they can (re)buy and sell. The use of CO<sub>2</sub> allowances therefore has an opportunity cost: used allowances cannot be sold. In any case, companies thus have an incentive to use free rights sparingly.

The EU ETS applies to companies with large installations in specific sectors, such as refining, steel and paper industries, power generation, chemicals and breweries. Aviation within Europe is also covered by the EU ETS obligation. In total, about 40 per cent of European greenhouse gas emissions are now covered by the EU ETS, and this share will expand to more than 60 per cent in the coming years (as per the revised ETS Directive (EU) 2023/959). As part of the Fit for 55 package, large ships in maritime shipping will also be covered by the EU ETS from next year, and from 2027 there will be a separate emissions trading system (ETS-2) for energy and fuel suppliers to the built environment and road transport, while fuel consumption in small industry will also be covered. This will also impose a common CO<sub>2</sub> cap on these companies. Thus, a large part of the companies that receive fossil subsidies are already or soon to be covered by the EU ETS (MinFin, 2023).

The emissions cap is based on the European climate goals of achieving 55 per cent emissions reduction by 2030, and being climate neutral by 2050. To meet those targets, the ceiling in the EU ETS decreases annually – by 2.2 per cent since 2021, by 4.3 per cent from 2024, and by 4.4 per cent per year from 2028. The agreed ceiling in 2030 is therefore 61 per cent lower compared to emissions in 2005.

With the gradual reduction of emission caps for an increasing number of economic sectors, the EU ETS sets the framework within which the European economy can develop in the coming years. Without change, the policies agreed until 2030 continue into the period after, meaning that from 2039 no new emission allowances will be issued in industry and power generation – these activities will then have to be climate-neutral (Cozijnsen, 2023a; Pahle et al., 2023). Only banked emission rights may then be used to emit greenhouse gases. Industrial and power companies that then have remaining CO<sub>2</sub> emissions that cannot be captured or reduced are likely to be able to surrender 'negative emissions' via 'carbon removal credits' (Cozijnsen, 2023b). There will then be no net CO<sub>2</sub> emissions added to the EU.

## **Fossil subsidies do not determine emissions**

In the discussion about fossil subsidies, it is often suggested that these subsidies perpetuate fossil energy use, or that emissions are not going down fast enough, but this view is questionable to say the least.

Regardless of whether EU ETS participants receive subsidies or not, companies will have to find ways to reduce their emissions, one way or the other (Van Soest, 2023). Indeed, with the annual reduction in the number of allowances made available by the EU, the supply of allowances will become increasingly limited. This obligation applies to all participating companies in all participating countries. In this respect, a chemical company in, say, the Netherlands faces the same circumstances as chemical companies in all other countries within the EU ETS area.

Because of the existence of the EU ETS, abolishing fossil subsidies has little effect on the relative price of fossil versus renewable energy, contrary to what Van Wijnbergen et al. (2023) suggest. If the Netherlands abolishes fossil subsidies, there will be no substitution of more expensive fossil energy by renewable energy, but a substitution of Dutch producers by foreign ones, who will still use fossil energy in the process. Abolishing fossil subsidies therefore mainly disadvantages Dutch companies compared to their foreign competitors elsewhere in the EU.

There is also no reason to believe that Dutch subsidies are substantially higher than in other countries. Currently, in almost all European countries, large users of energy pay a significantly lower tax rate on their energy use than small users (Amores et al., 2024).

However, fossil subsidies may appear higher in the Netherlands because small users in the Netherlands have very high tax rates: for Dutch households, energy costs comprise more than 60 per cent of taxes, while in the EU the average is less than 40 per cent (Amores et al., 2024).

Now what if the Netherlands decided to abolish this 'fossil subsidy' on energy use for large users? The result would be that not only small users but also large users would pay higher taxes than elsewhere in Europe. Dutch companies would see their competitive position deteriorate within Europe due to the higher costs, which could cause them to lose market share to competitors in other European countries where tax rates have not been raised.

Emissions then move elsewhere in Europe, but the total amount of emissions does not change: after all, the emissions cap within the EU ETS remains unchanged. That this is not an unthinkable situation is shown by the impact analysis on abolishing fossil fuels for basic industry (Kalavasta, 2023): a total and unilateral abolishment, without (partial) compensation in, for instance, corporate taxes, could completely destroy profitability.

## **Free allowances had a purpose**

That some of the participants in the EU ETS get the allowances for free has a good reason - and may even be good for the climate. If European companies had to buy their allowances, they would be at a competitive disadvantage and could therefore lose market share compared to companies outside the EU ETS area. Emissions from these companies' operations could then in principle move to countries with less stringent climate policies and much higher CO<sub>2</sub> levels per unit of product. For example, the CO<sub>2</sub> intensity of comparable industry outside the EU is more than double that in the Netherlands (CPB, 2020). The total amount of emissions then increases globally, while economic damage is suffered in Europe.

It can be debated whether this free allocation should be seen as a subsidy or not, because on the one hand there is no tax rebate or financial transfer, but on the other hand the companies do receive something valuable for free (Woerdman et al., 2008). In any case, the number of free allowances is linked to companies' efforts to reduce their emissions per unit of product (according to Article 10 of the amended ETS Directive). Indeed, this allocation is based on European benchmarks, which means that the number of allowances one gets is based on how much CO<sub>2</sub>-efficient companies emit. These benchmarks are gradually being tightened. This will give companies an incentive to take energy-saving measures, as otherwise the number of allowances they can receive for free will be lowered.

In any case, free allowances are slowly but surely being phased out. At the start of the system in 2005, almost all participants got the allowances for free, but gradually more and more allowances are being auctioned. Only companies operating in international markets – where the risk of carbon leakage outside the EU is high – now get the allowances for free. In ten years, free allowances should be phased out completely (as stipulated in Regulation (EU) 2023/956).

In the coming years, free allowances will already further decline in importance, mainly because of the introduction of a carbon tax at the external borders of the EU ETS area. This so-called Carbon Border Adjustment Mechanism (CBAM) imposes a levy on imports of a number of goods (namely steel and iron, aluminum, fertilizer, electricity, cement and hydrogen) when the CO<sub>2</sub> price in the exporting country is lower than the CO<sub>2</sub> price within the EU ETS. This way, the competitive position of European companies is not affected by CO<sub>2</sub> pricing, and there is less reason to hand out allowances for free. The CBAM will be fully operational from 2026.

Incidentally, the CBAM will not yet apply to European chemicals, so that the immediate abolition of free allowances could jeopardize the competitive position of this sector. In particular, abolishing the 'fossil subsidy' on the non-energy consumption of mineral oils (including naphtha) could lead to a significant relocation of the production of plastics and

medicines, among others, abroad (CE Delft, 2022). To avoid this, abolishing the fossil subsidy would have to be accompanied by additional international policies.

## **Lower cap for more emission reduction**

The most effective measure leading to more emission reduction is to further lower the emissions cap. After the recent tightening of the annual cap decrease, Europe's reduction path is 'Paris proof', in line with the EU climate targets for 2030 and 2050. But Europe may want to continue to lead the way, for instance if the rest of the world does not reduce emissions sufficiently to limit global warming. The emissions cap can be further reduced for this purpose via the so-called Market Stability Reserve (MSR).

The MSR is mainly designed to reduce a surplus of emission allowances. When participating companies leave a relatively large portion of their emission allowances unused – due to innovation or production decline, or because coal-fired plants are closed – then fewer emission allowances will be needed the following year. Each year, the European Commission therefore reviews how many allowances are unused, and if this so-called Total Number of Allowances in Circulation (TNAC) exceeds a limit, then fewer allowances are auctioned in the following year.

The use of the MSR, which is subject to predetermined calculation rules, has already led to additional reductions in the quantity of emission allowances in recent years – supporting the CO<sub>2</sub> price level, despite the decrease in demand during the corona crisis (Osorio et al., 2021; Gerlagh et al., 2022).

Thanks in part to the MSR, national policies can be a good complement to European climate policies. For example, a targeted subsidy for renewable energy projects, such as blue or green hydrogen, can help companies go green at lower cost. This will allow companies to initiate the transition sooner, requiring less drastic adjustments elsewhere in the economy. For instance, if industry moves towards electrification or the use of hydrogen, this could prevent the need to produce less in order to still stay under the emissions ceiling. Subsidies can therefore help promote energy transitions in companies, reducing the need for other and possibly more difficult adjustments in the economy.

Moreover, the existence of the MSR does not mean that reducing emissions in the Netherlands will necessarily bring about a reduction in the emissions cap. Indeed, the reduction of the cap depends on the number of unused allowances across the EU. Because the MSR is delayed and incomplete in taking up the additional surplus, there is a risk that the CO<sub>2</sub> price could fall somewhat in the meantime due to the Dutch emission reduction, which could inhibit the sustainability of European industry elsewhere. Through the ETS Directive, the Netherlands can inform the Commission that fewer allowances need to be auctioned, but then it must be clear exactly how much emissions are falling.

Through the MSR, the abolition of fossil subsidies could in theory also lead to additional emission reductions in the EU. But because the effect on emissions is not immediately clear, there is a risk that abolishing fossil subsidies could harm competitiveness while having no effect on the climate.

## Fossil subsidies possibly unfair though

Equity considerations may well be a reason to phase out fossil subsidies – because it may be seen as unreasonable that (large) companies pay less taxes per unit of energy than small consumers. This in itself is a defensible argument, but for a comprehensive assessment of the fairness of such differences, it is important to include all pros and cons. For example, the marginal tax rate paid by households is much higher than the rate they pay on average per unit of energy: after all, each household receives a fixed amount of tax relief because the government considers energy consumption a basic need. Moreover, households receive other benefits, such as a company car, the reduced excise duty on petrol and a price cap on the use of natural gas and electricity.

## Conclusion

Attention to the differences in taxes on energy use and the subsidies that the different groups receive is necessary because of the importance of a just energy transition, but not to accelerate that transition. After all, in Europe, the energy transition is mainly determined by the EU ETS. If we want to give the transition an extra boost, an accelerated reduction of the emissions cap is needed. In addition, targeted subsidies for emission reduction – such as electrification and use of green hydrogen – can ensure that companies in the Netherlands make their processes climate-neutral faster, without having to compromise on their competitive position. In contrast, abolishing fossil subsidies in the Netherlands mainly results in Dutch companies having a harder time competing with foreign companies, while the climate impact is highly uncertain because of the operation of the EU ETS.

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## Epilogue: Tightening emissions trading scheme is the real no-brainer in fossil subsidy debate

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In October, we argued in *ESB* that the EU ETS ensures the achievement of agreed CO<sub>2</sub> targets regardless of the existence of fossil subsidies (Mulder et al., 2023). Shortly afterwards, the Lower House of Parliament pronounced that the EU ETS should be taken into account when phasing out fossil subsidies (Resolution by Erkens and Boswijk, 2023). With this, we achieved an important goal of writing the article: our concern was that the discussion on fossil subsidies was conducted as if the EU ETS did not exist, while this cornerstone of European climate policy has a major impact on the effectiveness of other climate policies, including the elimination of fossil subsidies. We will also use this now well-established term here, although in fact it is largely about introducing 'fossil taxes'.

Our article triggered many reactions (Metten, 2023; Gautier et al., 2023; Van Wijnbergen et al., 2023). Some seem to have read our piece as an argument that all fossil subsidies can safely remain in place. That was not our point. Our point was that specific policies for sectors covered by the EU ETS, such as abolishing fossil subsidies, do not directly reduce emissions, and may cause displacement of emissions within the EU.

Apparently, we did not make the focus on fossil subsidies for EU ETS activities sufficiently clear in our previous article. There is no doubt that a substantial part of fossil energy use is not covered by the EU ETS and thus needs specific policies to achieve emission reductions, such as the removal of fossil subsidies. In the responses to our previous article, however, we also sensed a lack of understanding about how the EU ETS works and its implications for national policies. We therefore elaborate on a number of points here.

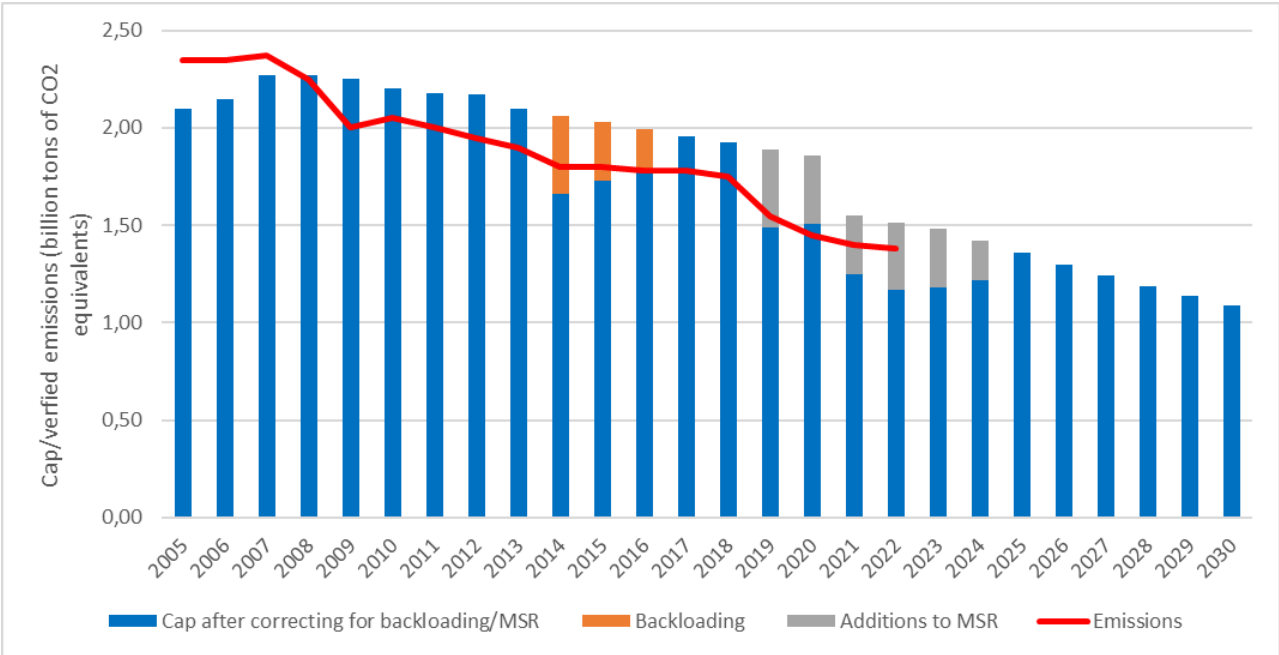
### EU ETS regulates quantity of emissions

For the sectors under the EU ETS, fossil subsidies are a side show. Many seem to see the EU ETS primarily as a pricing instrument, but it is primarily a standard-setting instrument that limits the quantity of emissions. This means that fossil subsidies in EU ETS sectors do not affect the quantity of emissions: they merely affect how emissions are reduced. Thus, the metaphor

used by Van Wijnbergen et al. (2023a) in which the EU ETS is the air conditioning and fossil subsidies are the heating that works against it is incorrect in terms of the effectiveness of it all: the target temperature level is achieved.

It is true, however, that fossil subsidies within EU ETS sectors make the energy transition less efficient. However, that argument applies equally well to subsidies for renewable electricity generation, for example. Both types of subsidies may serve different purposes, but they have no effect on the number of emissions (Mulder, 2019). This is illustrated, for example, by the fact that emissions in the EU ETS area have fallen in line with the emissions cap over the past decades (Figure 1): in 2022, emissions from the EU ETS sectors were 41 per cent lower than in 2005. All these years, all kinds of other measures existed, both fossil subsidies and renewable energy subsidies, but they only affect the costs incurred by companies covered by the EU ETS to stay below the cap. Such measures may of course be desirable to help companies make the necessary transition, but they have no effect on emissions.

Figure 1: Emissions in European sectors regulated by emissions trading system



- Note: Excluding aviation and from 2021 excluding UK (excluding power plants in Northern Ireland).
- Source: European Environment Agency ETS data viewer

**No decrease in allowances if fossil subsidies are abolished**

The number of allowances allocated annually within the EU ETS (for free or at auction) depends not only on the cap set for the entire EU ETS area, which decreases annually, but also on the additional measures taken by governments or the European Commission to put fewer

(or more) allowances into circulation. These additional measures are related to the functioning of the so-called Market Stability Reserve (MSR).

Several commentaries on our previous article argued that the MSR would ensure that the abolition of fossil subsidies in the Netherlands would lead to actual emission reductions (Gerlagh, 2023). However, this is not correct. The MSR works at the level of the entire EU ETS area. There must therefore be a surplus of unused allowances in the whole area for allowances to be removed (NEa, 2023). If a company reduces its Dutch operations because of the abolition of fossil subsidies, but the company or a competitor starts producing more elsewhere in Europe (e.g. because lower Dutch emissions depress the emission price), then on balance there is no effect on total emissions and no allowances will be taken out of the market.

There is another route to achieve a decrease in the number of allowances, and that is when a country can demonstrate that fewer allowances are required for certain activities, such as through a forced closure of coal-fired power stations. This recently happened in Germany, where the German government has chosen to hand out fewer allowances due to the withdrawal of coal-fired power stations from the market (BMUV, 2023). The European Commission then reduces the auction budget for the country in question. However, there are no such concrete effects on emissions if fossil subsidies are abolished: it will remain to be seen how companies respond to them. The Dutch government cannot therefore easily argue how many emissions the Commission can remove from the market.

## **Compliance in the EU ETS is almost one hundred percent**

An important element in an emissions trading system is of course that compliance with the obligation to have sufficient emission allowances is properly guaranteed. This assurance is done in every country by national emissions authorities, such as the NEa in the Netherlands. If a company emits more than it has in allowances, it will be fined. This fine is not an easy task, as Van Wijnbergen et al. (2023) state. If an ETS company emits one ton of CO<sub>2</sub> too much, it must pay a fine of 100 euros plus inflation per ton and must still reduce the currently uncovered ton of CO<sub>2</sub> – on top of the reductions it is required to make next year. Non-compliance is therefore very expensive; partly for this reason, compliance by companies under the EU ETS is almost one hundred percent every year.

## **Pricing gap not relevant under EU ETS**

Because the EU ETS is essentially a standardization instrument, a pricing deficit for activities that fall under the EU ETS is not directly relevant: after all, the total use of fossil energy is determined by the emissions ceiling, not by the price level. This is also in line with the fight against global warming: after all, it is directly linked to the amount of CO<sub>2</sub> in the atmosphere. An advantage of the trading system is that it is also worthwhile to reduce CO<sub>2</sub> in the atmosphere in another way, such as through carbon capture and storage (CCS). Mere pricing or abolition of fossil subsidies would not provide that option.

Calculating a climate pricing deficit, as CPB/PBL (2023) does and Van Wijnbergen et al. (2023) propose, is only useful for activities that do not fall under the EU ETS. After all, relative prices determine the use of fossil and renewable energy there. However, a pricing deficit is not relevant for activities that fall under the EU ETS.

Nevertheless, the EU ETS is likely to significantly reduce the pricing gap in the coming years. The expectation is that the CO<sub>2</sub> price will rise considerably – according to PBL (2023) to around 140 euros in 2035. The reference price that CPB/PBL uses for the social costs of emissions is 130 euros per ton of CO<sub>2</sub>, which means that the pricing deficit in its entirety disappears if the price expectation comes true.

### **Fossil subsidies under the EU ETS will erode**

It is incorrect to state that the burden of fossil subsidies on public resources is enormous, as Van Wijnbergen (2023b) does. In any case, subsidies will be phased out in the coming years. This will partly happen directly by gradually abolishing free allowances within the EU ETS until ultimately zero in 2034. But it will also partly happen indirectly: by the faster decreasing emissions ceiling in the EU ETS from 2024, the increasing CO<sub>2</sub> price and through additional climate policy, the use of fossil fuels will decrease sharply in the coming years.

The erosion of the basis for fossil subsidies also means that abolition of fossil subsidies will not release billions of dollars. The Budget Memorandum also states that climate policy will drive decarbonization, which will result in the amounts being much lower, which is confirmed by CPB/PBL (2023). In other words, there is no 40 to 46 billion euros available that could be used for, for example, additional climate measures, lowering labor taxes, or for education and health care.

### **Abolition of fossil subsidies at Dutch *Alleingang* expensive and ineffective**

Van Wijnbergen et al. (2023) propose abolishing fossil subsidies in order to change relative prices in such a way that there is a movement away from fossil-driven activities. That is a good proposal if the decision is made everywhere in the world to abolish these subsidies. However, the recent policy discussion specifically concerned the proposal to abolish fossil subsidies only in the Netherlands, while it is known that comparable tax exemptions and discounts exist in all other European countries as well as outside Europe. Only in the past few months has the EU been considering abolishing fossil subsidies.

If the tax benefits were only abolished in the Netherlands, this would lead to a sharp increase in costs for companies based in the Netherlands. For example, an energy tax of 0.49 euros per cubic meter (the rate that households now pay) instead of the current 0.066 euros (from one million Normal cubic meters of natural gas) corresponds to an additional tax of approximately 250 euros per ton of CO<sub>2</sub>. This is not an amount that can be passed on without damage if other EU countries do not implement this tax. Leakage effects in case of a Dutch *Alleingang* are a serious possibility with these types of amounts.

It is also a misconception to think that only sustainable challengers are being put behind. If the Netherlands opts for the unilateral fossil tax, this may result in more greening in the Netherlands, but this effect must be weighed against the disadvantages of a loss of the industry's competitive position due to a higher cost price.

The gradual introduction of a CO<sub>2</sub> import tax under the Carbon Border Adjustment Mechanism (CBAM) limits the leakage risks of a European CO<sub>2</sub> price, while at the same time offering the opportunity to gradually abolish the free allocation of emission allowances. However, CBAM does not compensate for the abolition of tax exemptions, especially if this only happens in the Netherlands (CE Delft, 2018). Furthermore, emissions from the Dutch chemical sector, both their direct emissions that fall under the EU ETS and the feedstock to make plastic and medicines, are not covered by the CBAM.

The urgency of the climate problem can therefore best be translated into a discussion about tightening the EU ETS. This could mean a faster reduction path for the large emitters in industry and the electricity sector, in addition to the introduction of the second emissions trading system ETS-2 with a stricter reduction path for SMEs in industry, for transport sectors and for the built environment. The EU ETS is therefore the real no-brainer in the discussion about fossil subsidies – and that does not have to be a brainteaser.

## **Emission reduction outside EU ETS**

Many rightly note that the EU ETS does not cover all CO<sub>2</sub> emissions. In this context, CPB-PBL (2023) points to bunker fuels, which are responsible for approximately a quarter of Dutch emissions. Only large seagoing vessels and intra-EU flights fall (partly) under the EU ETS ceiling. For the rest, there is no CO<sub>2</sub> ceiling or CO<sub>2</sub> pricing. Something should therefore be done about this quickly, either by pricing them or by placing them under a decreasing emissions ceiling. A problem here is that the tax benefits for these fuels are subject to international rules. It is wise to investigate how existing tax measures can be adjusted or how these activities can be placed under a decreasing emissions cap.

## **Effective climate action should not be taken for granted**

The EU ETS is an effective and efficient instrument to reduce emissions and achieve agreed CO<sub>2</sub> targets, which should be taken into account in a more nuanced discussion about abolishing fossil subsidies. We often receive the response to that message: "Do you have no concerns at all about the EU ETS and the climate problem?" Yes, we do have that. Firstly, politicians must show their resolve in further lowering the emissions ceiling and not gradually weaken the targets. However, this is a concern that applies to any form of climate policy. Moreover, the EU ETS is much better anchored in Europe than many other climate measures.

Secondly, participants must be able to reduce emissions. The strengthening of electricity grids, the construction of CO<sub>2</sub> storage infrastructure, the hydrogen economy, sustainable carbon

chains, the slowness of licensing and the shortage of personnel are serious supply restrictions, but again these restrictions also apply to other forms of climate policy.

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