

Svebio

Comments on state aid regulation

The purpose of the regulation (EU 651/2014) “declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108” and the guidelines on state aid for environmental protection and energy 2014 – 2020 (2014/C 200/01) is to enable the member states to fulfil the targets and ambitions in the EU energy and climate policies, as well as national targets, by allowing exceptions from the general state aid regulation. This is made clear in points 3, 4 and 5 in the environmental protection and energy guidelines, where “fight against climate change” is specifically mentioned in point 5d.

We agree with the general purpose of the state aid regulation, to avoid harmful support and subsidies that distort the market, but we note that the regulation, and the implementation of the regulation, in some cases contradicts the purpose to enable the member states to fight climate change and support the targets in the climate policy. This is specifically true in the Swedish case of support to biofuels by means of carbon taxing and tax exemption. This issue has been on the agenda for many years, and has hampered the development of the biofuels market and particularly the investments in biofuels production in Sweden.

We note that the EU Treaty in article 191.1 stipulates that union policy shall contribute to combating climate change, and in 191.2 that polluters should pay. We also note that according to article 194.1 the Union shall promote renewable energy, and that Member States have a right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply (194.2). We think that these over-bearing provisions should guide the formulation of the state aid rules.

Background

Sweden has already made a comprehensive and almost total conversion of fuels in the heating sector, from fossil fuels (mainly heating oil) to bio- and waste-based district heating, as well as other renewable sources, like biomass (pellets, firewood and chips) and heat pumps, along with energy efficiency measures. The greenhouse gas emissions for residential heating has been cut by 90% since 1990. A major reason for this transformation has been the carbon tax, introduced in 1991, and today the highest globally and seen as an example by international bodies, like the World Bank and IMF. The development confirms that carbon taxation is an effective incentive in climate policy.

A similar transformation must now take place in the transport sector, to replace fossil transport fuels with renewable energy, both renewable biofuels and renewable electricity. The adopted Swedish target is to reach net zero greenhouse gas emissions by 2045, not including land use (LULUCF). A middle-term target is to reduce the emissions from domestic transports by 70% to 2030, compared to 2010. This is only possible with a combination of biofuels and electricity along with promotion of rail and other low carbon transport modes. Biofuels will play a major role.

The conversion from fossil fuels to biofuels has already come a long way in Sweden. Until 2017 there was a fast growth in the share of renewable fuels in the transport sector, replacing fossil fuels like diesel and petrol. In 2017, the share of renewable in transport was 38% (Eurostat) calculated according to RED method, and 21% in actual volume according to energy content. The RED number has recently been re-calculated to 32% by the Swedish authorities, based on a re-definition of PFAD, a by-product in palm oil production earlier seen as a waste product.

The Swedish level is more than three times as high as the renewable energy target for transport of 10% in 2020, a target that Sweden surpassed several years ago. The main reason for the fast development of renewable energy in the transport sector in Sweden is the application of polluter pays principle through carbon taxation and tax exemption for renewable fuels. This policy made biofuels competitive on the fuel market and made it possible for private citizens, freight companies and municipalities to switch fuels at reasonable cost.

The development could have been even faster, with another interpretation of state aid regulation. The EU Commission implementation held back both use and production of biofuels.

The current implementation and its consequences

The implementation of state aid rules in combination with the interpretation of the energy tax directive has for Sweden meant:

- . Tax exemption, from energy tax and carbon tax, is considered a form of production aid and therefore qualifies as state aid, whereas a mandatory quota guaranteeing a market share is not.
- . Even when tax exemption is granted, it cannot exceed a certain level, as it would be considered “over-compensation”. Competing products on the market have to be taxed in a way that doesn’t favor them over the major product, in this case fossil diesel and fossil petrol.
- . The effect has been that Sweden was forced to introduce extra taxes on biofuels in cases where the tax exemption made them competitive with their fossil counterparts. The EU directives in this way protected fossil transport fuels from competition and nullified the effect of carbon pricing.

Here are some of the effects on the market:

- . The Swedish government was only granted the right to give tax exemption (from the carbon tax and energy tax) for limited periods, usually only for two years at a time. This resulted in uncertainty in the market, and held back investments in domestic production.
- . As a rule, the decisions from the Commission almost always arrived very late, in some cases even after deadline (!). This increased the uncertainty in the market.
- . The resulting lack of investments in production capacity inside Sweden has led to higher dependence on imported biofuels than otherwise would have been the case.
- . The regulation against “over-compensation” has added to the uncertainty, as the calculations to prove or disprove if over-compensation took place have to be done in a period after these occurred. This in some cases led to tax increases in a market where the cost relations were totally different.

. A final result of this uncertainty, and of the uncertainty concerning state aid regulation prior to 2020, was that the Swedish government was forced to introduce a new system for support to biofuels, replacing tax exemption with a reduction quota system that came into effect 1 July 2018. After the first year with this new system, the growth in the biofuels market has slowed down, or even reversed. Compared to a system with tax exemptions, the quota system has introduced a cap for growth of the market for biofuels.

. To guarantee a positive development for pure and high-blend biofuels (biogas, E85, ED95, B100 and HVO100), the Swedish government has kept the system with tax exemption for these fuels. It is very difficult to include these fuels in a common quota as it would make these distributors completely dependent on the large oil companies, and reduce competition. This part of the system is now in limbo, as there is no clarity about state aid regulation after 2020.

The implementation of state aid regulation and EU tax regulation in the Swedish case has been detrimental to a quick transformation of the fuel use in the transport sector, and has resulted in higher emissions of fossil CO₂ than would have been possible from a technical standpoint and as desired by the public and Swedish politicians. It has particularly harmed the market for the ethanol fuel E85, where Sweden made large investments in a distribution system with 1 700 pumps, and B100 and HVO100, pure biodiesel used in heavy duty vehicles and in most of Sweden's public buses. Both for E85 and for B100, the Swedish government was forced to introduce taxes to avoid over-compensation.

It is hard to evaluate how much un-necessary CO₂ emissions the policy has resulted in, but it could be several hundred thousand to a million ton. One thing is certain: the prevailing uncertainty has resulted in much lower investments in Swedish production capacity in biofuel production, both in first and in second generation technologies.

Our view is that the implementation of the state aid rules and the energy tax directive in the Swedish case is not in accordance with central parts of EU policy as stated in the Treaty.

. It has hampered Sweden's ambitions to fight climate change in the transport sector.

. It limits the implementation of polluter pays principle (article 192.1). An exemption for biofuels of a carbon tax is a natural part of the system of carbon taxation. This tax should be levied on fossil fuels and not on renewable fuels and fossil fuels should not be protected from prize competition.

. It limits Sweden's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply (194.2).

. It also goes against the targets of the regulations on energy and environmental protection point 3, 4 and 5, and particularly point 5c about fighting climate change.

Reaching Sweden's 2030 target

If the same system regulation is implemented after 2020, it will be detrimental to the further development in Sweden, and will made it very difficult to reach the 2030 target to reduce emissions from the transport sector with 70%. To reach this target we must use both increasing blend levels and pure and high blend fuels. Relatively high blends are feasible in diesel, but difficult in petrol. Sweden has a relatively high share of petrol cars, and E85 is a good alternative on this market. A very large share of public transport already has switched

to pure biodiesel, HVO100 and B100. Of the public buses, 86% already use pure biofuels like 100% biodiesel or biogas. In a case with no tax exemption for these products, the municipalities would have to switch back to regular diesel or fossil gas, as the price difference would be prohibitive.

The conditions on the Swedish biofuel market are exceptional in a European context, where Sweden already has reached a level three to four times about other EU member states. Sweden must not be forced to adjust to the low level in other member states but be allowed to continue its successful transition away from fossil transport fuels.

To reach the ambition 70% emission reduction target in 2030, we cannot solely rely on blending levels in regular diesel and petrol. This is a result of the high levels we have already reached. We must be allowed to further develop the market for pure biofuels (HVO100, B100, ED95, biogas), and biofuels with high blends, like E85. These fuels need tax exemption also in the future. Otherwise they will disappear from the market. To some extent they can be included in a quota system. But for the most part, this is not possible. Within a common quota, they will lose out, because of higher relative cost. Also, many new companies have entered the market, selling only pure and high-blend products, often directly to end consumers like freight companies and local bus companies.

Many actors on the market have switched fuels completely. This is true for a number of companies on the consumer market: food chains, dairies, breweries, etc. As already mentioned, the local bus fleets already run almost entirely on pure biofuels. A consequence of not having tax exemption on pure biofuels would lead to a reduction from 86% biofuels in public transport down to 20%, according to an estimate from this sector.

If pure and high-blend biofuels disappear from the market, this will also be the end of vehicle and motor construction for these kinds of fuels. This will be harmful for the development of the future market for advanced biofuels, not least for heavy-duty vehicles. Swedish companies have a central role in this development.

A calculation by Svebio shows that the emissions from the transport sector could increase by 1.23 million tons CO₂ per year if the pure and high-blend fuels disappear from the Swedish market. Production capacity will be dismantled as well as logistics chains, with loss of jobs. The distribution network for E85 will be closed down, with following economic loss.

It must be clarified that “pure and high-blends” can be both of first and second-generation biofuels. The market for pure and high-blend first generation biofuels is crucial for the introduction of second-generation fuels. When the transport market is fully de-carbonized, in the Swedish case in 2045 at the latest, all fuels will have to be pure biofuels, as there will be no market for fossil fuels.

Crop-based biofuels

The state aid regulation contains a number of provisions geared against crop-based biofuels (called “food-based”). These appear in section 7 (article 41.2), and in points 113 and 121 in the guidelines. These points were formulated at a time when many saw phase-out of crop-based biofuels as a central part of EU policy. This has changed:

. The newly adopted renewable energy directive (RED II) does not include a phase-out of crop-based biofuels. On the contrary, member states are allowed to report up to 7% of these

fuels during the whole period until 2030. The member states can use the share 2019 + 1%, but not more than 7%. The phase-out is now only for “high ILUC crops”, which according to the proposal from the Commission will only apply to palm oil. For the other starch, sugar and oil crops, there will be production and use until at least 2030, at the same level as today.

- . The negotiations on the new common agricultural policy include new focus on using agricultural resources for energy production, and may leave it to the member states to have more say on the implementation of the agricultural policy. This opens up for member states to use abandoned or under-utilized farmland for energy crop production.
- . The supportive document to the EU Commission’s Climate vision 30 November 2018 shows that there will be tens of millions of surplus agricultural lands in 2050, on top of already abandoned farmland. The assumption is that these lands will be used for cellulosic energy crops like grass and short rotations cellulosic crops. It would, however, in many cases make more sense to plant conventional annual energy crops.

It is with these policies not feasible to limit the possibilities for support to crop-based biofuels in the coming state aid regulation. Further limits through the state aid regulation will lead to increased use of fossil fuels when replacing biofuels on the market, and higher emissions of CO₂. To limit support to first generation biofuels does not stimulate the switch to second generation biofuels. Quite the contrary. Advanced biofuels will need the market for biofuels in general, both in blends and in pure biofuels. It is particularly important to have enough volume in the market for development of new vehicles and motors.

In Svebio’s view, the European Union needs to reverse its policy on crop-based biofuels and give European farmers an opportunity to contribute to the transformation of the transport sector and reduce the climate impact from fossil transport fuels. Already today, there are millions of hectares of abandoned and under-utilized agricultural lands both inside EU and in neighboring countries in East and Central Europe. At the same time, rural areas are losing income and population. Europe has for decades had surplus production of food. Increased yields and demographics will further increase surplus resources in European farming in the coming years, and increase the potential for energy crops production.

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