Climate Protection Quota

Starting next year, the biofuel and the mineral oil industries will have to face some major changes. Due to new legal requirements, the pricing system and the expected sales volume for biodiesel and bioethanol will be modified. Being an implementation of the Fuel Quality Directive, these new provisions aim to reduce greenhouse gas emissions in the transport fuel market.

Status-quo: Biofuel quota

Until now the mineral oil industry was required to put bring a minimum quantity of biofuels into the market. This minimum quantity amounts to a share of 6.25% (in terms of energy) of all transport fuels sales, which can be met through B7, B100, E10, E5 etc.

2015 onwards: climate protection quota based on reduction of GHG emissions

What's New: Starting in 2015, the Federal Immission Control Act (Bundes-Immissionsschutzgesetz) requires that the mineral oil industry reduces the greenhouse emissions of its products by 3%. From 2017 onwards, this reduction requirement will be increased to 4.5% and by 2020 it will reach 7%. In order to achieve this goal, the mineral oil industry will need to employ biofuels. (Note: in July 2014 the German government has drafted a piece of legislation that stipulates a more modest development of the climate protection quota: from an initial 3,5% in 2015, they will be raised to 4% in 2017 and finally to 6% in 2020.)

Therefore, every supply of certified biodiesel and bioethanol will be accompanied by a certificate that discloses the amount of greenhouse gas emissions saved through the use of that fuel. This means that if biofuel is used (usually by blending it into fossil fuel), the greenhouse-gas balance of the fuel sold at the pumps will be improved.

The producers of biofuels have enhanced their industrial processes in order to increase the greenhouse-gas efficiency of their products and, consequently, make them even more attractive to the mineral oil industry. Therefore, biodiesel and bioethanol only emit half of the greenhouse gases of fossil fuels, if not less. In other words, the "greenhouse gas efficiency" of biofuels translates to a improvement of at least 50-60% over traditional fuels and, in some cases, the improvement is even greater.

Consequences of the Climate Protection Quota:

- If the Climate Protection Quota were to begin in 2015 with only 3%, there would be a stark drop in biofuel sales because biodiesel and bioethanol already reduce greenhouse gas emissions by an average of 60%. This is a much greater reduction than originally assumed

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by the legislator. During the legislative discussions on the quota, it was estimated that greenhouse gas reductions would reach an average of 48%. Considering that the actual reduction has proven to be much higher, less biofuel needs to be employed in order to fulfill the quota. We therefore **demand** that the Climate Protection Quota should be adjusted to account for the capability of the biofuel industry and that the mineral oil industry should reduce **greenhouse gases to a much greater extent**. It should be assured that the amount of renewable energy in the transportation sector stays at least constant. Considering the sales of biofuels in 2013 and the currently realistic reductions of greenhouse gas emissions, a Climate Protection Quota of **4%** is already achieved today.

- The greenhouse gas reduction will become the price-determining factor for biofuels. Because the mineral oil industry seeks to employ as little biofuel as possible, it will give preference to the biofuels that reach a high reduction. Considering that no other European country is introducing a strict Climate Protection Quota, the price of biofuels will be determined by its greenhouse gas reduction capacity only in Germany. Therefore the German market will attract biofuels with high GHG-savings from all over the world, which will decrease the overall amount of biofuels used in Germany.
- Furthermore, there is always a chance that the information related to greenhouse gas reduction will be fabricated or calculated incorrectly by producers in order to increase sales. In face of such concerns, the biofuel industry **demands stringent oversight** of emissions calculations. Until now the German Ministry of the Environment is not willing to introduce such rigorous inspection standards for fear of incompatibility with European Law. A recent report by legal experts from the law firm Freshfields confirming the compatibility of the suggested oversight standards with European Law has done nothing to change the opinion of the ministry. The world's turned upside-down: the industry demands strict controlling and the ministry refuses.

In detail:

- How can greenhouse gas emissions be reduced?

  The possibilities for GHG reduction are regulated by the Renewable Energy Directive, Annex V C "Methodology." For example, greenhouse gas emissions can be reduced via:
  - Improved waste heat technology
  - Utilization of cogeneration of combined heat and power (CHP)
  - Improved isolation of thermal conduction
  - Usage of more efficient machines
  - Independent energy supplies from renewable energies
  - Shorter transport distances
  - Emission savings through deposit and geological storage of carbon dioxide (CCS) or its replacement through other methods (greenhouses).

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Because of the direct impact these optimization measures have on the climate footprint of biofuels, German biofuels producers have already implemented many of them.

Also in the agricultural sector, changes to the cultivation of the plants can have a large impact on the carbon footprint of the end product (reduction of the usage of fertilizers, fossil fuels etc).

- How is the GHG reduction calculated?

Over the course of 2015, mineral oil companies will continuously monitor their sales and determine the quantity of biofuels that they need to use in order to achieve their GHG-saving obligation. By the beginning of 2016, they will know precisely how much fuel they have sold. Hence, they will be able to calculate how much greenhouse gases their products have emitted. The first step is to determine how big the emissions would have been if they had sold only fossil fuels. Based on this theoretical value, it is possible to calculate how big the greenhouse gases emissions have effectively been, considering the usage of biodiesel and bioethanol, which reduce GHG emissions. The actual value (fossil + biofuels) must be 3 % below the theoretical value (only fossil fuels).

- Why are stricter monitoring standards necessary?

From 2015 onwards, the price of biodiesel and bioethanol will be determined by how much greenhouse gases they save in comparison to fossil fuels. The reductions have to be assessed during production and documented. The Certificate of Sustainability is the only document that serves as a proof of GHG savings. The problem: up to now only a GHG emissions threshold must be met, if this is the case, auditors that certify the sustainability of biofuels do not investigate the actual emissions any further. This means that so far, only the sustainability requirements for land use, social criteria and the minimum GHG-reduction of 35%, which is easily achievable, are monitored. Given the fact that the GHG savings will become the price determining factor, it needs to be sufficiently monitored. In other words, in the new economic scenario (from 2015 onwards), market players will have a strong incentive to falsely declare a higher reduction value for their products and thus obtain an advantage over their competitors. As a result, the switch to the ambitious system of Climate Protection Quotas requires an adaptation of a new and more effective monitoring system. In a joint statement, both German Certification Systems ISCC and REDCert have made concrete suggestions on how this new monitoring system may look.

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