

The impacts of regulating GHG emissions in the Danish agricultural sector

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New GHG (Greenhouse Gas) emissions targets are to be set by the European Commission under the Effort Sharing Regulation for the period 2021-2030. As for the previous resolution, these targets concern the main GHG emitter sectors not included in the ETS system: agriculture, transport, waste and heating. Different targets have been set for different EU countries based on GDP per capita and taking into account cost-effectiveness. Although the modalities are not entirely set—and negotiations are still ongoing—a general target of 39% emissions reduction (compared to 2005 levels) has been suggested for Denmark.

The main objective of this presentation is to present an analysis of the impact of meeting this suggested target on Danish agriculture, i.e. how would Danish agricultural production be affected if the sector is to decrease emissions by 39% and taking into account that other EU member states will also have their own targets to meet.

For the analysis, we have obtained data from the European Union on marginal abatement costs and GHG emissions reduction potential for all EU-countries agricultural sectors. We use this data to construct cost increase scenarios in the agricultural sectors on the different EU member states. We then analyze these scenarios using the GTAP model, with a special focus on production changes within the EU.