

GUIDE OF THE BEST AVAILABLE TECHNIQUES TO REDUCE THE ENVIRONMENTAL IMPACT OF LIVESTOCK

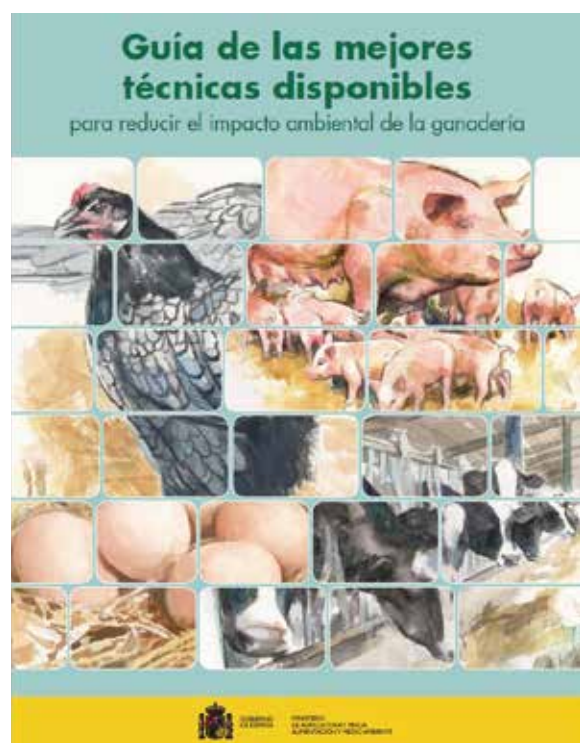
■ OUTLINE OF THE CASE

Recommendations to reduce emissions from animal husbandry of the Intergovernmental Panel on Climate Change (IPCC), United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution and the Best Available Techniques (BAT), have been merged and integrated in a friendly format for farmers and general public information.

Contributes to the achievement of the ODS 2 and ODS13.

■ POINTS OF THE CASE

- To prevent or, where that is not possible, reduce the environmental impact of livestock production, a number of technologies have been developed and recommended.
- The main objective of this document, drafted by the Ministry of Agriculture, Fisheries and Food, is to make these best available techniques accessible, in the simplest way possible, to farm managers, technicians involved in implementation and control and the public in general.
- The core of this publication is a compilation of the best available techniques (BAT) recognized by international bodies. This compilation is based on the Commission Implementing Decision (EU) 2017/302. Although these MTD are originally destined for specific type of production, the document is applicable to most of the farms and different livestock production.
- Recommendations of Intergovernmental Panel on Climate Change (IPCC), United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution have also been included.
- All the information has been merged and integrated in a friendly format to easily understand the techniques interactions, estimation of emission reductions and cost estimations, to facilitate their understanding and choice by the farmer.
- Available at the following web page:
https://www.mapa.gob.es/es/ganaderia/temas/ganaderia-y-medio-ambiente/mejorestecnicasdisponiblesparareducirelimpactoambientaldelaganaderia_tcm30-436663.pdf



ZOOTECNICAL BASES TO CALCULATE THE FEED BALANCE OF NITROGEN AND PHOSPHOROUS AND ENTERIC FERMENTATION IN SPANISH LIVESTOCK

■ OUTLINE OF THE CASE

Development of emission inventories is necessary to estimate the relative significance of emissions from livestock and to evaluate the effects of mitigation efforts. Spain estimates NH₃, NO, NO₂, N₂O, CH₄, non-methanic volatile organic compounds, as well as particulate matter (PM₂, PM₅, PM₁₀ and TSP) with an advanced methodological level (TIER II).

Methodology and results are available to the general public. Contributes to the achievement of the ODS 2 and ODS13.

■ POINTS OF THE CASE

- By virtue of the international commitments, Spain estimates the emissions into the atmosphere of certain contaminants through the Spanish system of emissions inventory (SEI) in accordance with guidelines established by the Intergovernmental Panel for Climate Change (IPCC) and the European Programme of Evaluation and Environmental Control (EMEP/EEA).
- With the ultimate goal to improve estimates of emissions, the Ministry of Agriculture, Fisheries and Food (MAPA), with the collaboration of the Ministry for Ecological Transition (MTE), has developed a methodology to determine national coefficients of excreta and emission factors related to the activity of livestock production in Spain. With those documents, a detailed and complete information is provided to meet the needs of international standards to the relevant animal species (pig, iberian pig, poultry, horses, bovine, ovine, caprine). This methodology has sought representation, completeness, consistency, transparency and comparability. It meets the requirements of the IPCC guidelines included in 2006 to elaborate methodological guides of the National GHG Inventories (IPCC, 2006), and joint guidelines of the European Programme of Evaluation and Control of 2016 (EMEP/EEA, 2016), with respect to the obligations of emissions reporting.
- The information provided allows the estimation of emissions of NH₃, NO, NO₂, N₂O, CH₄, non-methanic volatile organic compounds, as well as particulate matter (PM₂, PM₅, PM₁₀ and TSP) with an advanced methodological level (TIER II).
- This information is also publically available at the following web page:
<https://www.mapa.gob.es/es/ganaderia/temas/ganaderia-y-medio-ambiente/balance-de-nitrogeno-e-inventario-de-emisiones-de-gases/default.aspx>

