



# Climate footprint of the EU food system

**March 2021 - (AAC 2021-06)**



The Aquaculture Advisory Council (AAC) gratefully acknowledges EU funding support.

The European Green Deal sets out how to make Europe the first climate-neutral continent by 2050. This calls for a reduction in the environmental and climate footprint of the EU food system. The aquaculture sector can contribute by improving the use of aquatic resources, by promoting new sources of protein and by further developing aquaculture systems with low carbon footprints.

The EU aquaculture sector is diverse in terms of species and farming technologies. Climate impact can be measured in various ways (e.g., per kilo food, per kg protein, per calorie, per serving, etc.), and the lack of a common methodology for assessing climate impact makes it difficult to compare the various types of aquaculture products on the EU market – imported and farmed in the EU.

The overall emission of greenhouse gases (GHG) per kg of edible flesh at the farm gate from finfish aquaculture is similar to pig meat and broiler meat, but there can be significant variations. Bivalves, algae, and seaweed have the lowest emissions as they rely on natural food from their environment<sup>1</sup>.

The AAC recommendation on the climate footprint of the EU food system is therefore prioritized. First and foremost, the AAC points to the need for a common EU 'LCA tool' for quantifying climate impact at the farm level, and it proposes that such a tool should follow both IPCC standards and the PEF method.

Following that, the AAC:

1. Invites the European Commission to draft a Common Food Policy aimed at reducing the environmental and climate footprint of the EU food system to make Europe the first climate-neutral continent by 2050.
2. Emphasizes the importance of exploring options for improving the circular economy in aquaculture (fish manure, use of fisheries by-catch, waste, etc.)
3. Emphasizes the importance of exploring new forms of energy efficiency and energy production, such as the application of solar panels and the coupling of micro-hydroelectric or wind power plants on aquaculture farms.
4. Proposes to introduce national and EU policies for promoting climate-friendly public procurement.

---

<sup>1</sup> Quantifying greenhouse gas emissions from global aquaculture, Macleod et al, Nature Scientific Reports (2020) 10.

5. Stresses the need to ensure that imported seafood that does not comply with relevant EU environmental standards is not allowed in EU markets; points to the introduction of minimum standards for sustainability as a starting point.
6. Proposes to develop and promote a new EU sustainable food labelling framework.
7. Supports measures to reduce the dependency on critical feed materials (e.g., soya grown on deforested land) by fostering alternative feed materials issued from responsible sourcing, such as insects, marine feed stocks (e.g., algae), and by-products from the bio-economy (e.g., fish waste).
8. Encourage further development of aquaculture systems with low emissions of GHG.



**Aquaculture Advisory Council (AAC)**

Rue de l'Industrie 11, 1000 Brussels, Belgium

Tel: +32 (0) 2 720 00 73

E-mail: [secretariat@aac-europe.org](mailto:secretariat@aac-europe.org)

Twitter: @aac\_europe

[www.aac-europe.org](http://www.aac-europe.org)