# **Icelandic Cod**



#### Fisheries in Iceland

Fisheries have been the backbone of Iceland's prosperity for decades and the country's seafood sector and connected industries are considered world leaders in implementing innovative solutions at every stage of the value chain, where the aim is always to improve utilisation, efficiency and quality. The natural resources around and in Iceland are generous and Icelanders are fully aware of how fortunate they are in that respect. This is why emphasis is placed on sustainability in every link of value chains that include Icelandic seafood.

### Sustainable fishing stocks and Eco-labelling

With that in mind, Iceland has become a model country for developing a quota system for the fishing industry which ensures responsible and sustainable fishing practices. The utilisation of the catch in processing is among the highest known in the world. Iceland manages the fishing chain entirely by itself and has a complete control over how it is carried out. This has given Iceland a unique reputation in fisheries management, in addition to the "clean and cold" N-Atlantic image that Icelandic seafood products have. The Icelandic seafood industry has been awarded certifications for their cod fishery from established third party Eco-labelling schemes, such as IRF and MSC, confirming the sustainability of the fishery.

**The IRF logo** indicates Icelandic origin of fish catches in Icelandic waters and responsible fisheries management. The logo provides opportunities for stakeholders in the value chain of Icelandic seafood to highlight Icelandic origin.



**The MSC** has developed standards for sustainable fishing and seafood traceability. Both standards meet the world's toughest best practice guidelines and are helping to transform global seafood markets.





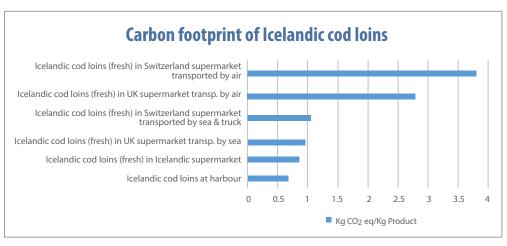


### **Low Carbon Footprint**

Iceland's fishery fleet and its corresponding value chain is not excluded from contributing to global warming and the industry is therefore constantly searching for mitigating measures. Icelandic fisheries however deliver seafood with relatively low carbon footprint when compared with other food products, which is confirmed in a recent study by Matís and several seafood partners.<sup>1</sup>

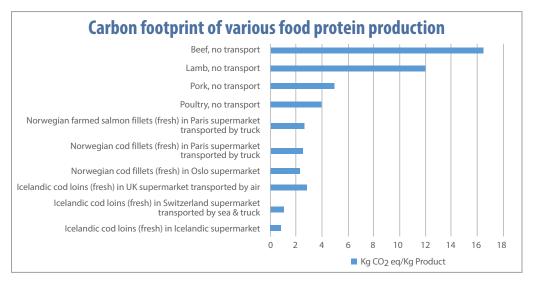
#### **About the Study**

With growing human population and increased fish consumption, the world's fisheries are not only faced with the challenge to harvest fish stocks in a sustainable manner, but also to limit the environmental impacts contributed to by the fishery itself and other links in the supply chain. With that in mind, the R&D institution Matís along with a number of suppliers of Icelandic seafood initiated a study on environmental impacts of fresh Icelandic cod loins. The aim of the study was to identify the main environmental impact contributors using Life Cycle Assessment and identify potentials for improvements.



#### **Relatively low Carbon Footprint**

Fish protein in general releases far less greenhouse gas emissions than most meat products and fresh Icelandic cod loins have relatively low carbon footprint compared to other animal proteins. It is therefor a common misunderstanding that Icelandic seafood products have large carbon footprint, in comparison with other competing products, due to distance to markets.



Carbon footprint of various food protein production. Veal, Beef, Lamb, Pork, poultry, transporting not accounted for<sup>2</sup>.

Norwegian farmed salmon and Norwegian cod<sup>3</sup>. Icelandic cod<sup>1</sup>.

## High Quality Product Full of Health

Besides being an excellent low-calorie source of protein, cod contains a variety of very important nutrients, such as Vitamin E and B as well as the all-important Omega-3 fatty acids. Recent studies also indicate that regular fish consumption can actually make you smarter, improve neurotransmission to the brain, suppress depression and positively affect dementia; which is why seafood like cod is sometimes referred to as "brain food".4

<sup>1</sup> Smárason B.Ö., Vidarsson	I.R., Þórðarson G., Magnúsdóttir L. (2014).
Life cyle assessment on fr	esh Icelandic cod Joins, Matis, Iceland

<sup>&</sup>lt;sup>2</sup> Buchspies, B., Jungbluth, N., & Tölle, S. J. (2011). Life cycle assessment of high-sea fish and salmon aquaculture. Uster: ESU-services ltd.

### Nutritional values for cod

Ingredients pr. 100 g eatable product		
Energy	326 kJ 78 kkal	
Protein	18,1 g	
Fat	0,5 g	
Saturated fatty acids	0,1 g	
Unsaturated fatty acids	0,3 g	
Cholesterol	58 mg	
Carbohydrates	0 g	
Vitamin A	1 μg	
Vitamin D		
Vitamin E	1,10 mg	
Vitamin B1	0,03 mg	
Vitamin B2	0,03 mg	
Folic acid	16 µg	
Vitamin C	0 mg	
Calcium	7 mg	
Sodium	118 mg	
Potassium	332 mg	
Iron	0,17 mg	

















<sup>&</sup>lt;sup>3</sup> W Winther, U., Ziegler, F., Hognes, E. S., Emanuelsson, A., Sund, V., & Ellingsen, H. (2009). Carbon footprint and energy use of Norwegian seafood products. SINTEF, Norway.

<sup>&</sup>lt;sup>4</sup> Raji, C.A. (2014), Jackson, P.A. et al. (2011), Gómez-Pinilla, F. (2008).