

# Donau Soja and Thanninger Freiheit

## A climate-friendly egg

**The Carbon Footprint of eggs is largely determined by the choice of feed for laying hens. A recent study by the Research Institute of Organic Agriculture (FiBL) Austria proves this based on eggs of the brand 'Thanninger Freiheit' by poultry farm Geflügelhof Aigner in Bavaria, Germany. Compared to the average German egg, the use of Donau Soja in Thanninger Freiheit eggs reduces 1.18 kg CO<sub>2</sub> per kilogram egg. At total emissions of 2.90 kg CO<sub>2</sub> per kg egg, this corresponds to a reduction of an astonishing 41%.**

### Our food choices are the key to reduce the carbon footprint

Food consumption accounts for one quarter of individual greenhouse gas emissions.<sup>[1]</sup> Therefore, food choices play a crucial role in consumers' personal carbon footprint. In the production of animal-based food, relevant amounts of greenhouse gas emissions already emerge during animal feed production. Globally, the change in land use - for example from grassland or forest to agricultural land - accounts for large amounts of greenhouse gases.<sup>[2]</sup> Data from INPE, the Brazilian National Institute for Space Research, show that between 2000 and 2016 approximately 5.3 million hectares of native vegetation in the Amazon and Cerrado have been transformed for soya production.<sup>[3]</sup> This corresponds to about one third of the arable area in Germany.

Brazil is the source of about 40% of the European Union's soya imports. They are mainly used as protein-rich animal feed in livestock production. Due to land transformations, soya feed from the Amazonas or from the Cerrado is often contaminated with high CO<sub>2</sub> emissions and therefore has a carbon footprint about ten times higher than that of Donau Soja / Europe Soya-certified European soya feed.



Thanninger Freiheit laying hens are fed with Donau Soja certified soya feed. Foto: Thanninger Freiheit

### Minus 41 Percent: How we reduce the carbon footprint in egg-production

The choice of feed has a clear impact on greenhouse gas emissions. This is proven by the study of FiBL Austria using the example of Thanninger Freiheit laying hens (see figure).

Compared to the average German egg, at Geflügelhof Aigner with the Thanninger Freiheit brand, the use of Donau Soja leads to an avoidance of 1.18 kilograms of CO<sub>2</sub> per kilogram of egg. With total emissions of 2.90 kg CO<sub>2</sub> per kg egg, this corresponds to a reduction of around 41%!

## CO<sub>2</sub> emissions per kg eggs

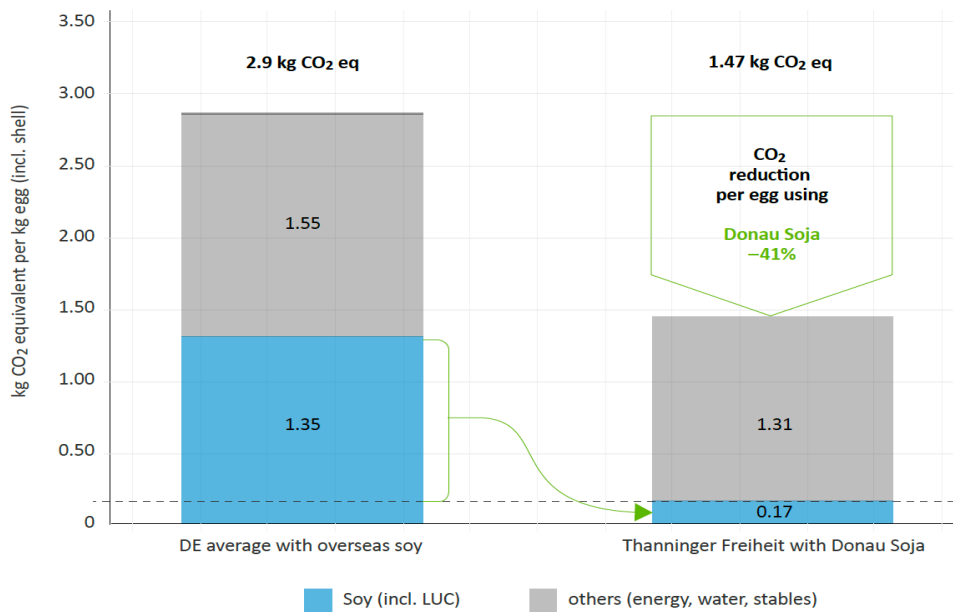


Figure: GHG potential of 1 kg shell eggs - comparison of Thanninger Freiheit eggs produced from laying hens fed with Donau Soja, free range eggs, versus German average eggs produced from laying hens fed with soya from overseas (25% USA, 75% Brazil), barn eggs.

Geflügelhof Aigner can reduce its CO<sub>2</sub> emissions by a further 8.4% through additional measures (use of photovoltaic electricity, in-house biogas plant) and thus avoids around 50% CO<sub>2</sub> emissions compared to the German average.

### Why the feed of Thanninger Freiheit laying hens is special

The European Union is heavily dependent on soya imports. In 2018 these amounted to almost 40 million tonnes, mainly from overseas. About 12 million hectares are needed to meet this demand – one and a half times the area of Austria! According to the Sustainable Trade Initiative (IDH), only 19% of the EU's soya consumption come from certified deforestation-free production, as guaranteed by Donau Soja. In Germany 3.6 million tons of soya are consumed annually, of which 22% come from certified deforestation-free production.



Eggs with soya from European producers  
Foto: Thanninger Freiheit

*[Note: Based on certified deforestation-free volumes (incl. credits) by six recognised soya standards] <sup>[4]</sup>.*

Geflügelhof Aigner is a pioneer and relies on regional and deforestation-free animal feed. A large proportion of the feed components for *Thanninger Freiheit* laying hens comes from the farmers' own production or from regional producers. As well, the toasted soybeans and critical soya meal comes from regional European production: Since 2014 *Thanninger Freiheit* laying hens are fed Donau Soja-certified soya feed from the Danube Region.

The quality labels Donau Soja / Europe Soya guarantee non-GM, sustainably produced soya of European origin. Donau Soja / Europe Soya-certified supply chains protect valuable ecosystems: Soya is only cultivated on land

that was dedicated for agricultural use not later than 1 January 2008. By relying on Donau Soja / Europe Soya, Geflügelhof Aigner actively contributes to the preservation of forests and other valuable ecosystems and thus to climate protection.



The quality labels Donau Soja / Europe Soya stand for quality- and origin-controlled soya feed

### About the study

In March 2020, Donau Soja commissioned the Research Institute of Organic Agriculture (FiBL) Austria to investigate how using Donau Soja / Europe Soya-certified soya products impacts the carbon footprint of food and feed products. Shell eggs of the 'Thanninger Freiheit' brand is one of the investigated products. Carbon footprint data on the level of soybean production are an essential part of the study and were collected by Footprint-consult e.U.

Donau Soja thanks Geflügelhof Aigner, the soya processing company BAG Güssing (AT), the soybean producer Agrotirnavé (RO) and the other participating soybean producers for their support in the data collection.

### About Thanninger Freiheit by Geflügelhof Aigner

Geflügelhof Aigner is a traditional family business rooted in agriculture. In 1999, the name „Bavarian eggs from ‚Thanninger Freiheit‘“ was launched as well as the current egg packing station was built. Geflügelhof Aigner is a pioneer in Germany in the field of sustainable and regional animal feed: since 2014, the farm has been Donau Soja certified. The chickens are fed non-GM, certified soya from Europe.

**Website:** [www.thanninger-freiheit.de](http://www.thanninger-freiheit.de)

## About Donau Soja

Donau Soja is a non-profit, independent and member-based organisation with its headquarters in Vienna and offices in several other European countries. The vision of Donau Soja is a sustainable, safe and European protein supply. To achieve this, Donau Soja supports, among other things, the sustainable production of soya in Europe and the development of regional value chains. The two labels Donau Soja / Europe Soya stand for non-GM soya products of controlled origin and quality from the Danube region and from Europe. Donau Soja unites over 280 members in 25 countries.

**Website:** [www.donausoja.org](http://www.donausoja.org)

## References

1. WWF Österreich, 2015. Achtung: Heiß und fettig – Klima & Ernährung in Österreich 2015. Online verfügbar unter: [www.wwf.at/de/view/files/download/showDownload/?tool=12&feld=download&sprach\\_connect=3023](http://www.wwf.at/de/view/files/download/showDownload/?tool=12&feld=download&sprach_connect=3023)
2. 2020 United Nations Framework Convention on Climate Change. Land Use, Land-Use Change and Forestry. Online verfügbar unter: [www.unfccc.int/topics/land-use/workstreams/land-use--land-use-change-and-forestry-lulucf/land-use--land-use-change-and-forestry](http://www.unfccc.int/topics/land-use/workstreams/land-use--land-use-change-and-forestry-lulucf/land-use--land-use-change-and-forestry)
3. Trase. Yearbook Soy 2018. <http://yearbook2018.trase.earth/>
4. The sustainable trade initiative (IDH), 2020. European Soy Monitor. Online verfügbar unter: [www.idhsustainabletrade.com/uploaded/2020/05/IDH-European-Soy-Monitor-v2.pdf](http://www.idhsustainabletrade.com/uploaded/2020/05/IDH-European-Soy-Monitor-v2.pdf)