



Slow Food®

FRIEND OF THE CLIMATE

Analysis of the environmental
impact of the Maremmana
Cattle Slow Food Presidium

#FOODFORCHANGE



INDACO
INDicatori Ambientali e CO₂

FRIENDS OF THE CLIMATE

Analysis of the process of production impact of some sustainable food products and Slow Food Presidia compared with similar, industrial products.

It's not just heavy industry, transport and the production of energy from fossil fuels that are producing greenhouse gases. Agriculture, including livestock farming—even when artisanal— also produces methane, carbon dioxide and nitrous oxide.

These gases join those produced naturally by marine and terrestrial ecosystems and create the so-called "greenhouse effect," in other words the global warming of the planet. This phenomenon, more than any other, threatens the future of our world. Of course, not all production processes have the same effect on global warming. Identifying foods that have a lower impact can help up make alternative, well-informed choices.

This is why Slow Food, with the scientific support of INDaco2 (a spin-off of the University of Siena, in Italy), has been carrying out analyses of some sustainable food products and Slow Food Presidia products (Presidia are Slow Food projects who promote small-scale sustainable producers with the aim to safeguard biodiversity, traditional knowledges and landscapes, <https://bit.ly/2zYISJL>).

The idea is to use universally accepted and applied scientific parameters to measure the environmental value of Presidia products and compared the results with industrial, similar products.

The emissions of a food production process can be measured thanks to the life cycle analysis (LCA) technique and their impact (the carbon footprint) can be expressed in grams, kilos or tons of carbon dioxide (CO₂ eq).

The differences that the Indaco2 study highlights are significant—in some cases, remarkably so.

In particular, it should be noted that the quantity of greenhouse gases emitted by small-scale, extensive farms is often entirely compensated by the capacity of these ecosystems to store carbon in the soil (what is known as "carbon uptake"). In other words, soils rich in vegetation can absorb and store carbon at an equal or higher rate than what is released into the atmosphere during production processes. This kind of natural compensation can effectively cancel out the farm's impact on the planet, and we can consider these farms a carbon "removers".

To make the results easier to understand, CO₂eq has been expressed in terms of the kilometers that a car would have to travel to emit the same quantity of CO₂.

Choosing these apples, or others cultivated in a similar, sustainable way, means helping the planet to fight climate change.

Save biodiversity, save the planet!

The complete study is available on the Slow Food <https://bit.ly/2CzxyIQ>

SLOW FOOD MAREMMANA CATTLE PRESIDIO



PRODUCER



PRODUCTION AREA



FARM SIZE



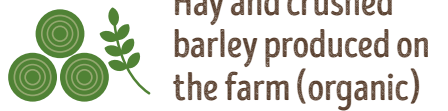
NUMBER OF ANIMALS



BREED



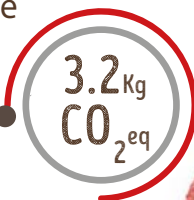
FEED



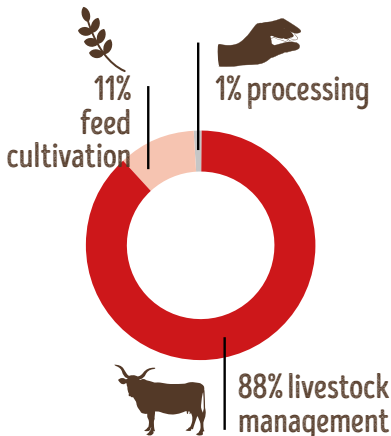
ANNUAL OUTPUT
9 tonnes of beef

Carbon Footprint

CO₂ emitted to produce
one hamburger made
with 200 g
Maremmana beef



CO₂ generated by



COMPARED TO AN INDUSTRIAL HAMBURGER



Good Practices



Animals' diet based on farm-produced barley, hay, and fresh grass; no silage



No use of chemical products for cereal cultivation



Use of manure from the barns as fertilizer



Use of lake water



Biodiversity conservation (local breed with high yields: 65% vs 60% for a conventional breed)



Short supply chain entirely managed by the farm



Carbon absorption by plant ecosystems on the farm (equal to 748 tCO₂/year) entirely compensates for the emissions generated by the production of Maremmana beef (equal to 180 tCO₂/year), with a surplus absorption of 568 tCO₂.

-568
tCO₂/YEAR

> BY BUYING MEAT FROM EXTENSIVELY RAISED CATTLE, YOU'RE HELPING THE PLANET!

The CO₂ savings made every year by the Menichetti farm, compared to the emissions produced on a farm that rears beef cattle intensively and conventionally (to produce the same quantity of meat), correspond to the emissions of a car travelling for...

...36,200 Km!



36,200
Km

WWW.SLOWFOOD.COM/SLOWMEAT



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