In 2017, Chicken Farmers of Canada launched its first life cycle assessment (LCA) of the Canadian chicken value chain to measure the environmental and social performance of Canadian chicken production.

40 YEARS OF CONTINUOUS ENVIRONMENTAL IMPROVEMENT

OUR APPROACH

PRODUCING MORE WITH LESS

Since 1976, our environmental performance significantly improved because of major productivity gains and about 20% improvement in our feed conversion ratio.

OUR RESULTS

LOWER ENVIRONMENTAL FOOTPRINT

Over the past 40 years, the work conducted by Canadian chicken farmers resulted in the following reductions:

- 37% lower carbon footprint
- 45% lower water consumption
- 37% lower non-renewable energy consumption

From coast to coast, farmers and businesses participated in this important study involving the entire supply chain of chicken production.
THE ENVIRONMENTAL FOOTPRINT OF CHICKEN PRODUCTION IN CANADA

BENCHMARK AND PERSPECTIVE

**KG CO₂ EQ. PER KG OF CHICKEN**

When considering the average carbon footprint of chicken in different regions around the world, Canadian chicken production has the lowest carbon footprint overall.*

- **Canadian Chicken**: 2.4
- **North America**: 3.0
- **Western Europe**: 4.4
- **Latin American and the Caribbean**: 4.4
- **Near East and North Africa**: 5.0
- **South Asia**: 5.1
- **East Asia and Southeast Asia**: 6.7

**PER KG OF PROTEIN, THE CARBON FOOTPRINT OF CANADIAN CHICKEN IS LOWER THAN THE OTHER LIVESTOCK COMMODITIES PRODUCED IN NORTH AMERICA***

The good performance of chicken protein is explained by the fact that chickens do not produce significant emissions from enteric fermentation. The feed conversion ratio is also the lowest among livestock.


CHICKENFARMERS.CA
**CARBON FOOTPRINT (GHG EMISSIONS)**

**2.4 KG CO₂ EQ./ KG OF CHICKEN**

**CONTRIBUTION OF EACH LIFE CYCLE STAGE**

- 51% **FEED PRODUCTION**
- 27% **BROILER FARMS**
- 9% **HATCHING EGG PRODUCTION**
- 8% **PROCESSING**
- 4% **TRANSPORT**
- 1% **HATCHING**

Feed production contributes to half of the total carbon footprint. The GHG emissions are mainly caused by fertilizers and diesel use to produce feed crops (wheat, corn and soybeans).

**BREAKDOWN OF GHG EMISSIONS AT BROILER FARMS**

- 44% **BARN HEATING**
- 23% **MANURE AND MORTALITY MANAGEMENT**
- 18% **OTHER**
- 15% **ELECTRICITY**

Farms activities are the second largest contributor and they account for a little over one quarter of the carbon footprint, mainly due to energy used on the farm.

**ENERGY USE**

- **41 MJ / KG OF CHICKEN**
- **25 MJ / KG OF CHICKEN**

**62% COME FROM RENEWABLE SOURCES**

- 78% **FEED**
- 16% **BIOMASS**
- 6% **ELECTRICITY**

“41 MJ would power 8 x 60W light bulbs for a day (24h)”

**38% COME FROM NON RENEWABLE SOURCES**

- 29% **BROILER PRODUCTION**
- 15% **PROCESSING**
- 8% **HATCHING EGG PRODUCTION**
- 5% **TRANSPORT**
- 2% **HATCHING**

The feed production consumes 41% of non renewable resources. This is mainly due to fertilizer production and diesel use.

**WATER CONSUMPTION**

- **65 L OF FRESHWATER / KG OF CHICKEN**

**59% FEED**

- 25% **OTHER**
- 16% **BROILER PRODUCTION**

Feed production accounts for 59% of the total water consumption. Irrigation represents the largest contribution to water consumption.
THE SOCIAL PERFORMANCE

A GLOBAL CONTRIBUTION TO THE CANADIAN ECONOMY

2,803 CHICKEN FARMERS & 191 PROCESSORS

PAY
2.2 billion in taxes

CONTRIBUTE
6.8 billion to Canada’s Gross Domestic Product

PURCHASE
2.6 million tons of feed, supporting other farmers in turn

SUSTAIN
87,200 jobs across the supply chain

COMMitted To Food Safety & Animal Care
100% Canadian chicken farmers are certified on the Raised by a Canadian Farmer On-Farm Food Safety Program (OFFSP) and Animal Care Program (ACP).

DEdicated To Social License
Over 90% of Canadian chicken farmers are engaged in their communities by providing free services to community members or by being engaged in municipal or regional organizations.

ComPetitive Working Conditions
Over 90% of Canadian chicken farmers pay their workers a salary over the provincial minimum wage and about 70% offer their employees benefits such as insurance and bonuses in addition to other benefits in kind.

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