

# THE EVOLVING JOURNEY TOWARDS SUSTAINABILITY EXCELLENCE

A  
COLLABORATIVE  
APPROACH

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.

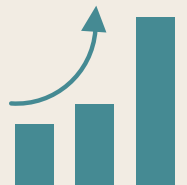
1976  
2016

## 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.

A study conducted in 2017 by

GROUPE  
AGÉCO

serecon

Canada

Growing Forward 2

CHICKENFARMERS.CA

This project was made available through the AgriMarketing Program under Growing Forward 2, a federal, provincial, territorial initiative

CHICKEN  
FARMERS  
OF CANADA  
LES PRODUCTEURS  
DE POULET  
DU CANADA

# THE ENVIRONMENTAL FOOTPRINT OF CHICKEN PRODUCTION IN CANADA



## BENCHMARK AND PERSPECTIVE

### KG CO<sub>2</sub> 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

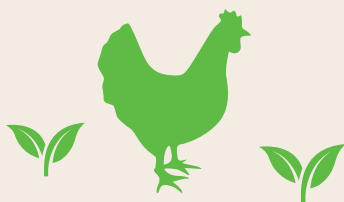
SOUTH ASIA 5.1

EAST ASIA AND SOUTHEAST ASIA 6.7

## PRESERVING THE HEALTH OF THE LAND AND THE FARMS

70% of Canadian chicken farmers are enrolled in their provincial Environmental Farm Plan.

This program evaluates farms in terms of environmental strengths and potential risks and farmers then develop action plans to address those risks.



**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.

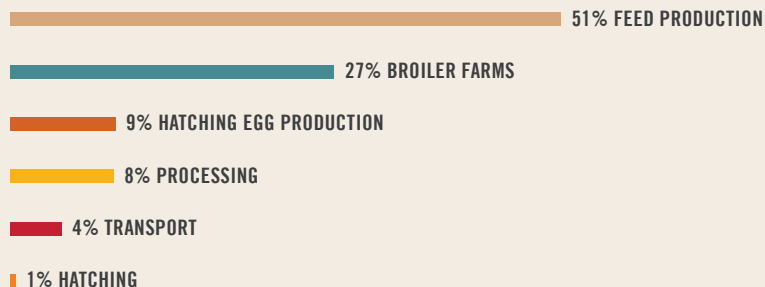
\* Source: FAO. 2017. Global Livestock Environmental Assessment Model (GLEAM).



## CARBON FOOTPRINT (GHG EMISSIONS)

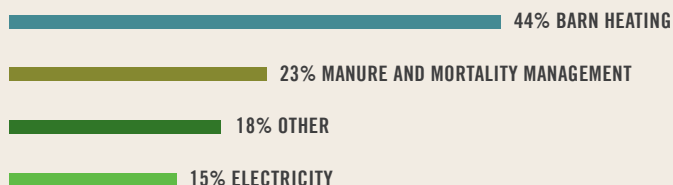
2.4 KG CO<sub>2</sub> EQ./ KG OF CHICKEN

### CONTRIBUTION OF EACH LIFE CYCLE STAGE



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



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.



37%

LOWER THAN THE 1976  
CARBON FOOTPRINT VALUE  
OF 3.4 KG CO<sub>2</sub> EQ.

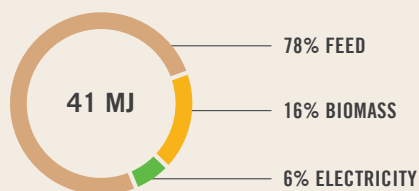


## ENERGY USE

41 MJ / KG OF CHICKEN

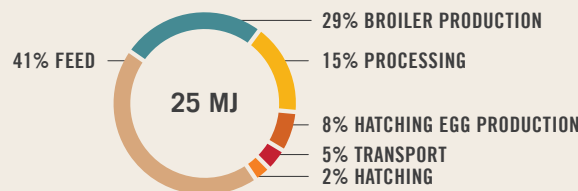
25 MJ / KG OF CHICKEN

### 62% COME FROM RENEWABLE SOURCES



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

### 38% COME FROM NON RENEWABLE SOURCES PROPANE, NATURAL GAS, OIL



*"25 MJ would power  
5 x 60W light bulbs  
for a day (24h)"*

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



37%

LOWER THAN THE 1976  
NON-RENEWABLE ENERGY  
USE VALUE OF 40 MJ.



## WATER CONSUMPTION

65 L OF FRESHWATER / KG OF CHICKEN



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



45%

LOWER THAN THE 1976  
WATER CONSUMPTION  
VALUE OF 118 L.



CHICKEN  
FARMERS  
OF CANADA  
LES PRODUCTEURS  
DE POULET  
DU CANADA



# 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.