

SCREENING ENVIRONMENTAL AND SOCIAL LIFE CYCLE ASSESSMENT (LCA) OF CANADIAN TURKEY



Turkey Farmers of Canada undertook a screening Life Cycle Assessment (LCA) of the turkey sector to better understand the environmental and social performance of the turkey industry in Canada. Turkey farmers, breeders, hatcheries, the feed industry and processing sector from across Canada worked together to participate in this study.

Approach

LCA is an assessment method regulated by the International Organization for Standardization (ISO 14040/14044).

LCA can help uncover the relative contribution of life cycle stages, identify hotspots and areas of improvement, and through scenario analysis, identify pathways for improvement.

Intended Application



Understand how **current practices** contribute to the carbon footprint and the social performance of the turkey industry.

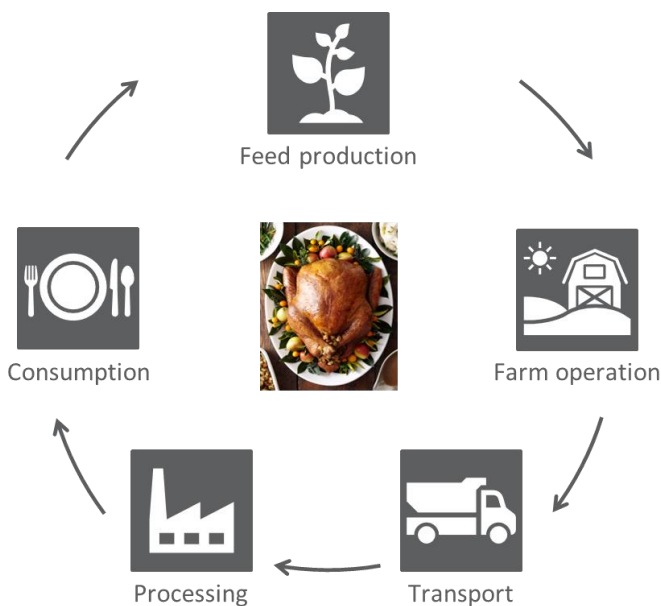


Identify opportunities for improvement to **help set realistic sustainability goals** for the future and target areas where the most change can be made.



Establish a baseline to **track the benefits** of the adoption of **best environmental and social practices** by producers in the future.

LCA methodology – a cradle to grave approach



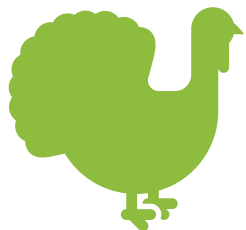
Study commissioned by:



TURKEY FARMERS OF CANADA™
LES ÉLEVEURS DE DINDON DU CANADA™

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Environmental Life Cycle Assessment Results



Annually, turkey consumption accounts for **13.3 kg CO₂ eq/year** or about **0.3%** of a typical consumer's total annual emissions.

This is equivalent to driving **53 km** in a passenger vehicle.

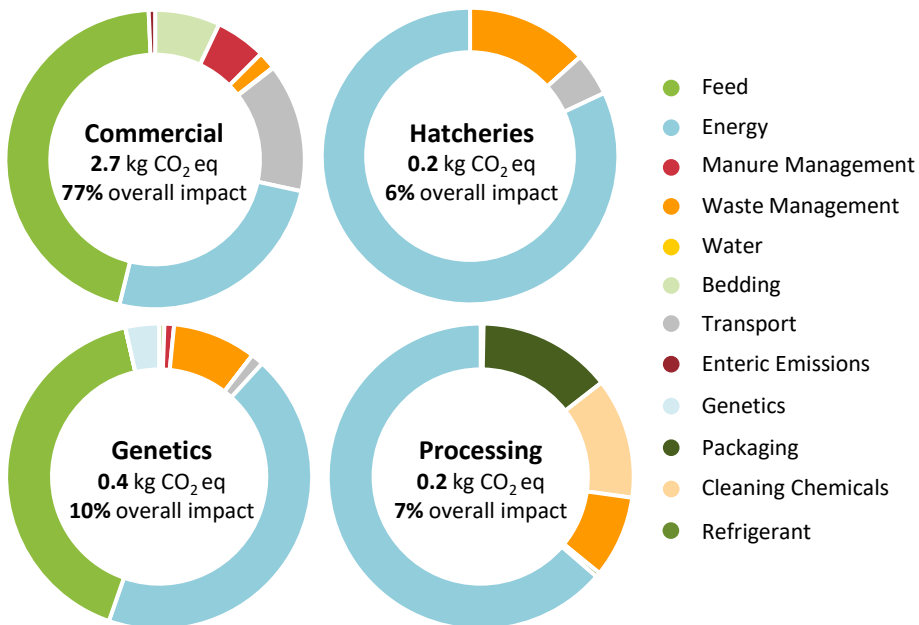


Global benchmarking indicated genetic selection and historically improved feed conversion ratios have kept the carbon footprint of Canadian turkey competitive with other poultry products.

1 kg eviscerated Canadian turkey emits 3.5 kg CO₂ eq

The largest contributors to emissions are:

- 1. Feed**
Primarily from corn, wheat, and soybean meal and their energy and fertilization inputs.
- 2. Energy**
Electricity, heating, and diesel for on-farm equipment are the main sources.
- 3. Waste Management**
Landfilling of animal waste drives impact.



A serving size of **100 g of eviscerated Canadian turkey** emits **0.35 kg CO₂ eq**



75-100 g of cooked turkey is the typically recommended serving size for adults.



Social Life Cycle Assessment Results

Over 520+ turkey farmers contribute to the Canadian economy:



The turkey industry in Canada generates **\$4 billion in economic activity annually**



The turkey industry **also contributes over \$1.2 billion to Canada's Gross Domestic Product (GDP)**, and generates **\$400 million in annual farm sales**



Supporting **over 16,000 jobs** across rural and urban centres

In addition to the industry economic contribution, **the social performance of Canadian turkey producers** was assessed through over 30 indicators documenting on-farm adoption of best management practices (BMPs) with respect to 3 key areas:

Business Management

Results show that farmers actively seek out opportunities to learn and innovate. Most respondents are active in training with a particular focus on: biosecurity, animal welfare and On-Farm Food Safety. Opportunities remain to adopt strong managements practices including, strategic plans and written succession plans.

Animal Health and Care

Animal health and care is a long-standing priority for Canadian turkey farmers. Responses indicated a high adoption rate of practices to prevent and assess animal health issues. The sector needs to continuously work to maintain the current high standards of animal health and care.

99% of existing turkey farmers have been certified under the TFC On-Farm Programs, with new entrants undergoing the initial certification process.

Social Well-Being

Over half of respondents have hired labour on farm. The majority (75%) have adopted actions to improve working conditions by providing benefits to employees. Additionally, most respondents, including paid and family working on farm, take great care on issues related to Occupational Health and Safety (OHS). Given the current labour shortage situation, farmers need to continue to ensure their practices sets them apart as employers of choice.

