

BC BROILER HATCHING EGG COMMISSION

JULY 2021 NEWSLETTER



INDUSTRY STATISTICS

YTD Hatchability

83.9 %

Average Lay Cycle End

56 weeks

Average Breeder Price

Female: \$10.99

Male: \$15.43

2021 Audit Stats

Total Premises to Audit: 58

Premises Completed: 19 / 58

Hatching Egg Tip

Click the link below to find a helpful poster on Brooding:

<https://www.cobb-vantress.com/assets/Cobb-Files/05a4a2ba58/Brooding-The-5-Essentials.pdf>

COFFEE MEETINGS

Advance notice that staff are looking to schedule Coffee Meetings with Producers during the second week of July; keep your eye out for the invitation email.

PLACEMENT NUMBER CHANGES

Production staff want to note that increasing placeable hens or changing placement dates remains challenging at this time; most placement changes as a result of quota transactions have to be done at least six months out (currently into February 2022).

AGRICULTURAL CLEAN TECHNOLOGY PROGRAM

Please see the attached News Release letter on the Clean Technology Program.

ACP – BARN SPECIFICATION UPDATES

A reminder to inform the on-farm department if you are renovating your barns or changing barn equipment to ensure premises ACP compliance.

RISK MANAGEMENT WORKSHOP

Farm Management Canada invites farmers to attend the Roots to Success Risk Management virtual training session. Click the link to register <https://fmc-gac.com/programs-services/risk-management/#rts-registration>

CHEP REQUEST TO PARTICIPATE

Attached is a request to participate in a CHEP ammonia research project.

CPRC – AMMONIA & VENTILATION

Please see the attached PDF on barn ventilation.

FOOD WASTE REDUCTION CHALLENGE

To learn more and on how to apply for this \$20-million Challenge, click the link below: <https://impact.canada.ca/en/challenges/food-waste-reduction-challenge-novel-tech>

COVID-19 – STEP 3 OF RESTART PLAN

Staff will be working predominately at the office starting July 5.

On-Farm staff require a minimum of 24 hours notice if you would like to reschedule your appointment.

Pricing Orders

Period	Live Chicken	Hatching Eggs	Saleable Chicks	Day-Old Broiler Chicks
A-165	1.684 \$/kg	608.26 ¢/doz	63.30 ¢/chick	82.24 ¢/chick
A-166	1.690 \$/kg	617.98 ¢/doz	64.31 ¢/chick	83.25 ¢/chick
A-167	1.757 \$/kg	637.62 ¢/doz	66.33 ¢/chick	85.27 ¢/chick
A-168	1.812 \$/kg	658.11 ¢/doz	68.45 ¢/chick	87.39 ¢/chick
A-169	1.950 \$/kg	685.49 ¢/doz	71.27 ¢/chick	90.21 ¢/chick
A-170	1.951 \$/kg	681.84 ¢/doz	70.90 ¢/chick	89.84 ¢/chick

Production Cycles

Period	Start Date	End Date
A-165	Aug 30, 2020	Oct 24, 2020
A-166	Oct 25, 2020	Dec 19, 2020
A-167	Dec 20, 2020	Feb 13, 2021
A-168	Feb 14, 2021	Apr 10, 2021
A-169	Apr 11, 2021	Jun 05, 2021
A-170	Jun 06, 2021	Jul 31, 2021

Notice to Producers – Request to Participate in a Research Project

March 3, 2021

Ammonia is a top research priority for CHEP as it is an important factor in the barn environment that affects human health as well as flock health. More broiler breeder-specific information is needed to ensure requirements such as those in the *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens and Turkeys* continue to be appropriate and reasonable.

To this end, CHEP is funding a research project with Université Laval entitled *Impact of ammonia and dust concentrations on worker and animal health and well-being in Canadian hatching egg production*, led by Dr. Caroline Duchaine, Dr. Marie-Lou Gaucher, and Dr. Geneviève Dion. In addition to an on-farm component based in Quebec, the researchers would like to contact broiler hatching egg producers across Canada to complete an online questionnaire on your respiratory health and another one on flock health to be used in the study.

The researchers will be contacting you regarding the questionnaire in the coming weeks via your provincial board. Your participation is encouraged as it will help CHEP contribute relevant, Canadian scientific knowledge to conversations about addressing ammonia.

Project updates will be available regularly via your provincial board, as well as through CHEP.

For more information, please contact your provincial board, or CHEP.



News Release

For immediate release

Helping farmers and agri-businesses adopt clean technologies to reduce emissions and enhance competitiveness

June 4, 2021 – Saint-Pie de Bagot, Québec – Agriculture and Agri-Food Canada

Today, during Canadian Environment Week, the Minister of Agriculture and Agri-Food, the Honourable Marie-Claude Bibeau, announced details of the new \$165.7-million Agricultural Clean Technology Program.

Under the program, farmers and agri-businesses will have access to funding to help develop and adopt the latest clean technologies to reduce greenhouse gas (GHG) emissions and enhance their competitiveness. This funding will help them continue to move towards a low-carbon economy by focusing on three priority areas: green energy and energy efficiency; precision agriculture; and the bioeconomy.

The new program has two funding streams:

- The **Adoption Stream** will support the adoption of clean technologies, with a priority on those that meaningfully reduce GHG emissions. Eligible recipients will have access to non-repayable contributions for projects that are at least \$50,000 in total cost. Agriculture and Agri-Food Canada will contribute up to 50% for projects with for-profit recipients and up to 75% for not-for-profit recipients. This funding stream will extend over five years, from 2021 to 2026, and will allocate \$50 million specifically for the purchase of more efficient grain dryers for farmers across Canada and \$10 million towards powering farms with clean energy and moving off diesel.
- The **Research and Innovation Stream** will support pre-market innovation including research, development, demonstration and commercialization of agricultural clean technologies. Eligible recipients will have access to non-repayable and repayable contributions of up to \$2 million for projects, normally cost-shared 50-50 with Agriculture and Agri-Food Canada. This funding stream will extend over seven years, from 2021 to 2028.

The two-step intake of applications will launch later this month. Eligible recipients for both streams include for-profit organizations, not-for-profit organizations and Indigenous groups.

Agriculture and Agri-Food Canada estimates that this program has the potential to reduce up to 1 megaton of greenhouse gases (carbon dioxide equivalent) from the Earth's atmosphere.

The Government of Canada's strengthened climate plan supports the development and adoption of cleaner practices and technologies that further reduce GHG emissions and protect the land, water and air that farmers depend on for their long-term sustainability.

Quotes

"Canadian farmers have always taken care of their land, and that is why we are leaders in sustainable agriculture. In the face of this new climate reality and the expectations of Canadian and foreign consumers who want to know that their food has been sustainably produced, we must double down on our efforts, particularly by investing in the development and adoption of energy-efficient technologies. Together, we will grow our agricultural sector in an even more sustainable way."

- The Honourable Marie-Claude Bibeau, Minister of Agriculture and Agri-Food



“Canadian farmers, ranchers and agri-food businesses are constantly innovating to make their practices greener and more sustainable. Investing in continuously helping the sector adopt clean technologies to cut greenhouse gas emissions is a key part of our plan to build a healthy environment and a healthy economy for all.”

- The Honourable Jonathan Wilkinson, Minister of Environment and Climate Change

Quick Facts

- Canada’s agricultural industry is already making contributions in the fight against climate change, as farmers and agri-businesses continue to make their operations more sustainable. Thanks to innovative best practices and technologies, agricultural production in Canada has doubled over the last 22 years while emissions have remained relatively stable.
- The agriculture sector has generated approximately 10% of Canada’s total greenhouse gas (GHG) emissions annually since 1990.
- This program builds on the original Agricultural Clean Technology Program, a \$25-million, three-year (2018-2021) investment to support research, development and adoption of clean technologies.
- The new Agricultural Clean Technology Program is part of the government’s strengthened climate plan, *A Healthy Environment and a Healthy Economy*, which is a key pillar in the government’s commitment to create over one million jobs, restoring employment to pre-pandemic levels. The climate plan includes 64 new measures and \$15 billion in investments in addition to the Canada Infrastructure Bank’s \$6 billion for clean infrastructure announced as part of its growth plan.
- As part of this climate plan, the Government of Canada launched the \$185 million, 10-year Agricultural Climate Solutions (ACS), to help develop and implement farming practices to sequester carbon and tackle greenhouse gas emissions. Budget 2021 committed an additional \$200 million to support the adoption of practices that will accelerate emission reductions in the sector.

Additional Links

[Greenhouse gases and agriculture](#)
[Agricultural Clean Technology Program: Research and Innovation Stream](#)
[Agricultural Clean Technology Program: Adoption Stream](#)
[A Healthy Environment and a Healthy Economy](#)
[Agricultural Climate Solutions](#)

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Backgrounder Agricultural Clean Technology Program

As part of the Government of Canada's [strengthened climate plan](#), the new Agricultural Clean Technology Program aims to create a supportive environment for the development and adoption of clean technologies that will promote sustainable growth in Canada's agriculture sector, while helping to drive the changes required to achieve a low-carbon economy.

Program Priorities

The Agricultural Clean Technology Program will provide contributions that focus on three priority areas:

Green energy and energy efficiency, to support better management of energy intensive processes, and introduction of energy generation.

Precision agriculture, which uses a wide range of technologies to gather and process data for the purpose of guiding targeted actions that improve the sustainability, efficiency and productivity of agricultural operations.

The **bioeconomy**, which employs technologies that use agricultural waste and by-products for energy and bio-product generation.

The new program will allocate \$50 million for the purchase and installation of more efficient grain dryers for farmers across Canada and \$10 million over the next two years to power farms with clean energy and move off diesel.

Program Streams

The program includes two funding streams: the **Research and Innovation Stream** and the **Adoption Stream**.

Research and Innovation Stream

This stream will support pre-market innovation, including research, development, demonstration and commercialization activities that address the program's three priorities. This stream will run from 2021 to 2028.

The Research and Innovation Stream includes non-repayable funding for research, development and demonstration activities, and repayable funding for commercialization and scale-up activities.

Eligibility

Eligible applicants for this stream are:

- For-profit organizations, including agri-food processors
- Not-for-profit organizations, including co-operatives
- Indigenous groups

Examples of eligible activities under this stream include, but are not limited to:

- Research and development of zero-emissions on-farm equipment
- Piloting and evaluating precision agriculture technologies that improve real time input use or nutrient management
- Demonstration or commercialization of anaerobic digesters or agri-based bio-products



Adoption Stream

This stream will support the purchase and installation of proven clean technologies and solutions that address the three priority areas, respond to environmental sustainability, and reduce greenhouse gas emissions. This stream will run from 2021 to 2026.

Funding under this stream is non-repayable for eligible projects.

Eligibility

The eligible applicants for this stream are:

- For-profit organizations, incorporated in Canada, including farm businesses
- Not-for-profit organizations, including co-operatives
- Individuals
- Indigenous groups

Examples of eligible activities under this stream include, but are not limited to:

- Energy efficiency improvements that enable better management of energy intensive agricultural processes, including the purchase and installation of energy efficiency improvements (e.g., grain dryers, barn heating, fuel switching, solar panels, heat pumps, etc.)
- Precision agriculture (e.g., GPS auto-steer guidance systems, soil sensors, and remote imagery etc.)
- Bioeconomy solutions (e.g., anaerobic digesters, bio-product boiler systems, implementing solutions using bioplastics etc.)

Application Process

For both streams, a Project Summary Form will be used to screen the applicant's and project's eligibility, fit and readiness to apply for funding. Applications that meet the program's priorities and eligibility criteria may be invited to submit a full project application.

Project Summary Forms will be accepted starting later in June 2021 on the program website. Applications will be accepted on a continuous basis until funding has been fully committed or otherwise announced by the program.

Related products

[Agricultural Clean Technology Program: Research and Innovation Stream](#)
[Agricultural Clean Technology Program: Adoption Stream](#)

Ventilation is a balancing act

Understanding your barn in different climate conditions is key to better air quality

Air quality concerns are a known problem on many Canadian poultry operations because emissions of particulate matter and ammonia are difficult to balance. Now, thanks to ongoing evaluation of various air quality control strategies, producers are better positioned to adopt tools that meet environmental, economic and animal welfare requirements for producing more sustainable eggs and poultry meat.



Bill Van Heyst, University of Guelph

Bill Van Heyst, professor of environmental engineering in the School of Engineering at the University of Guelph, has spent nearly a decade evaluating air quality control strategies in use on Canadian poultry operations. He conducts measurement campaigns on various farms to collect data points including indoor concentrations of pollutants, barn ventilation rates, samples from excreta, as well as other barn parameters such as indoor and outdoor temperatures and humidity levels.

“Recently we’ve been specifically looking at problems with ammonia and particulate matter,” says Van Heyst. “Ammonia is generated when barns have wet litter conditions, and particulate matter is generated in dry, dusty scenarios. Farm operators have to find this happy medium in terms of their litter management so moisture content doesn’t favour one side or another.”

As part of his team’s project, Van Heyst recently completed studies of cage-free egg barns in Saskatchewan and in Ontario, across various seasons. He is leading similar work in broiler breeder barns in Ontario.

Dry conditions create particulate matter

“Cage-free housing systems allow the birds to have more movement, and that leads to higher levels of particulate matter in the barn,” Van Heyst says. “As litter accumulates, it contributes to air quality issues through buildup of either ammonia or particulate matter.”

Particulate matter is easy to spot in a barn setting because the air appears dusty. Van Heyst’s research has revealed particulate matter is a bigger problem in the prairie provinces, where winter conditions are dry, and barn ventilation evaporates moisture off of the litter pack. He notes size fractionated particulate matter is a nasty toxin that poses a human and animal health risk, and is declared toxic under the Canadian Environmental Protection Act.

“Cage-free housing systems allow the birds to have more movement, and that leads to higher levels of particulate matter in the barn.”

Humid conditions boost ammonia levels

Conversely, humid winters more common in southern Ontario often lead to moisture finding its way into the barn, especially around air intakes as moisture condenses. Ammonia is common in barns with humid weather conditions, and it is more difficult for the average farm to monitor. Van Heyst says most people entering a barn may notice ammonia through a burning feeling in their eyes, but they will grow accustomed to it fairly quickly, and they might not register a problem.

Van Heyst says poultry barn ventilation is typically triggered off of temperature difference only, but secondary conditions

such as carbon dioxide and ammonia levels are also reasons to increase air flow. If carbon dioxide levels get too high, birds may become sleepy. If ammonia is too high, it may lead to eye and respiratory tract irritation. Prolonged exposure to high levels of ammonia can even lead to blindness in birds.

Understand your barn

"Managing these toxins is a balancing act, and seasonal conditions across geographic locations can put that balancing act into question," says Van Heyst. "Farmers really have to understand their own barn, and how it performs in different conditions – even a new barn might take a few flocks to get ventilation under control. Once you understand it, it's easier to use."

"Managing these toxins is a balancing act, and seasonal conditions across geographic locations can put that balancing act into question."

He also notes that tools and strategies for managing air flow are never one-sized-fits-all, and a solution that fails to meet economic, environmental and animal welfare needs is not truly sustainable. It's important that producers and researchers collect data to inform how new strategies perform in specific environments.

Know what your tools can do

Most recently, Van Heyst's team conducted a measurement campaign at a broiler breeder operation in Ontario that had installed a manure belt under the roosting areas. Later in 2021, he plans to take the same measurements at a similar operation in Ontario that does not have a manure belt.

"Broiler breeder operations are an interesting mix between cage-free layers and broilers, because the birds roam like broilers, but have fewer nesting areas than layers," says Van Heyst. "Traditionally broiler breeder operations do not have a manure belt, and excreta builds up over time. With this project, we're interested in whether the installation of a manure belt actually reduces the amount of ammonia the birds are exposed to."

He notes that even with a manure belt removing excreta, the barn developed a moisture problem and registered high ammonia levels shortly after placing a new flock in winter. The farm operator worked quickly to address the issue, and bring ammonia levels down. As part of the project, his team is putting hand-held ammonia analyzers to the test, to see how accurate their readings are, compared to his team's more advanced monitoring equipment.

Each of Van Heyst's measurement campaigns last from six months to one year, and each one assesses control strategies to reduce or mitigate ammonia and particulate matter from Canadian poultry operations. To date, his team has also assessed the use of water sprinklers, poultry litter treatment and a centralized air exchange system.

This project is expected to be completed by 2023.

This research was funded by the Canadian Poultry Research Council as part of the Poultry Science Cluster, which is supported by Agriculture and Agri-Food Canada (AAFC) as part of the Canadian Agricultural Partnership (CAP) program. Additional support was received from Egg Farmers of Canada, Canadian Hatching Egg Producers and the School of Engineering, University of Guelph.