

**HATCHING EGG SECTOR
COP-BASED PRICING PACKAGE**

POST-APPROVAL IMPLEMENTATION PLAN

CHICKEN SECTOR PRICING SUPERVISORY REVIEW

OCTOBER 20, 2022 [UPDATE]



Contents

- British Columbia Farm Industry Review Board Decision.....3
- Implementation Plan Schedule3
- Pre-Implementation Finalization Work8
 - COP Input Updates (including Mechanisms and Efficiencies).....8
 - Formula Finalizations.....10
 - Hatchery COP13
 - Next Iteration of the Hatching Egg COP13
- Reports14
- Stakeholder Engagement.....14
- Post-Submission Analyses.....15
- Period A179 Pricing Report to PPAC24

British Columbia Farm Industry Review Board Decision

On June 3, 2022, the British Columbia Farm Industry Review Board (BCFIRB) issued its decision on the BC Broiler Hatching Egg Commission's Proposed Pricing Package¹.

Approval was granted to implement the long-term pricing recommendations on the following conditions (paras. 1-4; 59-62):

The Commission give one production period implementation notice to the BC Chicken Marketing Board (Chicken Board), stakeholders, and BCFIRB; and

The Commission follow the graduated process established in its March 4, 2022 submission.

Further,

The Commission will provide an implementation progress report to BCFIRB by December 16, 2022.

On an on-going basis, the Commission will monitor implementation impacts on hatching egg producers and hatcheries; and, through the Chicken Board, implementation impacts on chicken growers and processors.

The Commission and Chicken Board are to collaborate as necessary to ensure any significant implementation impacts are duly considered and mitigated as appropriate.

To ensure all the conditions of the approval are met with continued stakeholder engagement, this implementation plan has been prepared. It is considered a living document and will be updated as work progresses through the implementation and into the post-implementation period (updates to the tables are provided in gold font with the most recent bolded).

Implementation Plan Schedule

Included in the schedule below are action items that either occur one-time (e.g., issuing the one-period implementation notice) or are recurring.

Details on the specific data points to be updated, including formulae finalization, follow this timeline.

✓ = Completed ~ = In Progress

Pricing Period	Dates	Action Item	Description	Date(s)	✓
A174	2022-01-16 to 2022-03-12	Submission – Pricing Proposal	Submission of the Pricing Proposal	2022-03-04	✓
A175	2022-03-13 to 2022-05-07	Submission – Follow Up	Prepare answers to questions, including a draft of the post-submission implementation analysis	2022-03-30	✓
		Submission – Follow Up	Meeting with BCFIRB regarding the Pricing Proposal submission	2022-04-12	✓

¹ BC Farm Industry Review Board. (June 3, 2022). [In the Matter of the Natural Products Marketing \(BC\) Act and BC Broiler Hatching Egg Commission Final Pricing Recommendations.](#)

A176	2022-05-08 to 2022-07-02	Submission – Follow Up	Respond to written submissions by stakeholders as requested by BCFIRB	2022-05-13	✓
		Decision	BCFIRB issues its decision, approving the Pricing Proposal	2022-06-03	✓
		Pre-Implementation Work	Drafting updates to the Implementation Plan Schedule following decision	2022-06-05 to 2022-06-17	✓
			PPAC Meeting – including Implementation Plan considerations discussion (i.e., A178 versus A179 implementation start)	2022-06-16	✓
			Stakeholder engagement – notice to other stakeholders for input on Implementation Plan	2022-06-17	✓
			COP input updates work	Ongoing	✓
			COP formulae finalizations work with stakeholder engagement	Ongoing	✓
		Decision	Board considers any advice from PPAC, BCCMB and/or other stakeholders; formal approval of Implementation Plan	2022-06-23[†]	✓
		Stakeholder Engagement	Next period pricing documents and considerations sent to PPAC to solicit advice per current practice under Linkage	2022-06-28 [†]	✓
		Decision	Board considers any advice from PPAC, BCCMB and/or other stakeholders; sets price for next pricing period per current practice under Linkage	2022-06-29 [†]	✓
		Price Announcement	Issue pricing for A177 per Linkage	2022-06-30	✓
A177	2022-07-03 to 2022-08-27	Pre-Implementation Work	COP input updates complete To be completed in conjunction with the below-noted formulae finalizations. BCEHA provided information concerning two data inputs August 22 following further extension. Staff completed the COP input updates for August 25, 2022.	2022-07-29 2022-08-19 2022-08-22	✓
			COP formulae finalizations complete Extensions to BCEHA engagement permitted, upon their request, from June 15 original meeting to June 29, to July 12, to July 14 for more time to read documents and respond. Further extension to August 19 for BCEHA to provide transparent sources for figures and additional new costs proposed to the formula at the July 14 meeting.	2022-07-29 2022-08-19 2022-08-22 2022-10-17	✓

			<p>BCEHA provided information concerning two data inputs on August 22 following further extension. Three other data points require further substantiation before inclusion.</p> <p>BCEHA letter dated September 14 requested discussion on Hatchery COP. The Commission requested a meeting on breeder chick finalization and Hatchery COP for September 29; BCEHA declined to attend.</p> <p>Discussions held between Commission and BCEHA representatives the weeks of October 3 and October 10. Further input received on formula. Draft final reviewed at meeting on October 14. Key inputs will be updated each pricing cycle per agreed upon formula. No further information received as of October 17; draft price set in accordance with formula and forwarded to PPAC.</p>		
			<p>Serecon Inc. completes input and formulae updates Input changes communicated to Serecon [completed]. Finalization of input figures dependent on both above-noted input/formulae finalizations. Date for input changes to be communicated to Serecon updated based on draft finalization of breeder chick margin submitted to BCEHA on September 26.</p>	<p>2022-08-10</p> <p>2022-08-22</p> <p>2022-09-29</p>	<p>✓</p>
		Stakeholder Engagement	Next period pricing documents and considerations sent to PPAC to solicit advice per current practice under Linkage	2022-08-23 [†]	✓
		Decision	Board considers any advice from PPAC, BCCMB and/or other stakeholders; sets price for next pricing period per current practice under Linkage; approves issuing one-period implementation notice	<p>2022-08-24[†]</p> <p>2022-08-25</p>	✓
		Price Announcement	Issue pricing for A178 per Linkage	2022-08-26	✓
		Notice	Issue one-period implementation notice	2022-08-26	✓
A178	2022-08-28 to 2022-10-22	Phase-in step	One-period wait following implementation notice	2022-08-28	✓

		COP Updates	Updates to current pricing inputs determined for next pricing period Guide PPAC through first draft of Pricing Package (14 days prior to price announcement)	2022-10-03** (2022-10-07)	✓
		Stakeholder Engagement	Next period pricing documents and considerations sent to PPAC to solicit advice (10 days prior to price announcement) Serecon noted it will not be possible to compare A179 COP-based pricing against the former Linkage-based pricing on October 3 due to the timeline of Chicken Farmers of Ontario not posting its prices (which are required for Linkage calculations) until generally one week or less before the next pricing period begins. A comparison will be added when CFO posts its pricing which permits Serecon to complete its Linkage-based pricing work. This comparison is a requirement by BCFIRB in its approval decision. Timeline extended due to further consultations with BCEHA (above) on breeder chick pricing.	2022-10-03** (2022-10-11) 2022-10-18	✓
		Stakeholder Engagement	Board forwards next period draft Day-Old Chick price to BCCMB (7 days prior to price announcement)	2022-10-14 [†] 2022-10-18	✓
		Stakeholder Engagement	PPAC advice due (7 days prior to price announcement)	2022-10-14 [†] 2022-10-19	✓
		Decision	Board considers any advice from PPAC, BCCMB and/or other stakeholders; sets price for next pricing period (4 days prior to price announcement)	2022-10-17 [†] 2022-10-20	✓
		Stakeholder Engagement	Board forwards next period Day-Old Chick price to BCCMB following Decision (4 days prior to price announcement)	2022-10-17 [†] 2022-10-20	✓
		Price Announcement	Board distributes pricing of Hatching Eggs (per dozen/saleable chick) and Day-Old Chicks for the next period	2022-10-21 2022-10-20	✓
A179	2022-10-23 to 2022-12-17	Phase-in step	Phase-in step is at 95.0%*	2022-10-23	
		COP Updates	Updates to current pricing inputs determined for next pricing period (14 days prior to price announcement)	2022-12-02	

		Stakeholder Engagement	Next period pricing documents and considerations sent to PPAC to solicit advice (10 days prior to price announcement)	2022-12-06	
		Stakeholder Engagement	PPAC advice due (7 days prior to price announcement)	2022-12-09†	
		Stakeholder Engagement	Board forwards next period draft Day-Old Chick price to BCCMB (7 days prior to price announcement)	2022-12-09†	
		Decision	Board considers any advice; sets price for next pricing period (4 days prior to price announcement)	2022-12-12†	
		Stakeholder Engagement	Board forwards next period Day-Old Chick price to BCCMB following Decision (4 days prior to price announcement)	2022-12-12†	
		Price Announcement	Board distributes pricing of Hatching Eggs (per dozen/saleable chick) and Day-Old Chicks for the next period	2022-12-16	
		Submission - Implementation Progress Report	Deadline for the Board to submit its implementation progress report to BCFIRB	2022-12-16	
A180	2022-12-18 to 2023-02-11	Phase-in step	Phase-in step is at 95.5%*	2022-12-18	
		
A181	2023-02-12 to 2023-04-08	Phase-in step	Phase-in step is at 96.0%*	2023-02-12	
		
A182	2023-04-09 to 2023-06-03	Phase-in step	Phase-in step is at 96.5%*	2023-04-09	
		
A183	2023-06-04 to 2023-07-29	Phase-in step	Phase-in step is at 97.0%*	2023-06-04	
		
A184	2023-07-30 to 2023-09-23	Phase-in step	Phase-in step is at 97.5%*	2023-07-30	
		
A185	2023-09-24 to 2023-11-18	Phase-in step	Phase-in step is at 98.0%*	2023-09-24	
		
A186	2023-11-19 to 2024-01-13	Phase-in step	Phase-in step is at 98.5%*	2023-11-19	
		
A187	2024-01-14 to 2024-03-09	Phase-in step	Phase-in step is at 99.0%*	2024-01-14	
		
A188	2024-03-10 to 2024-05-04	Phase-in step	Fully phased-in pricing at the level of an efficient producer*	2024-03-10	
		

* Capped to the lower of the step or the return for an efficient producer of the New (2020) COP w/ Mechanisms & Efficiencies. Full phase-in may occur prior to period A188.

† Date subject to any additional work to be performed by Serecon Inc. resulting from consultations.

“...” Refers to steps that are repeated per the A179 schedule; condensed to highlight the phase-in step percentage.

Pre-Implementation Finalization Work

It should be noted that as part of the pre-implementation work, coordination between the Commission and Serecon Inc. will be required as all surveys are housed by Serecon Inc. to maintain producer confidentiality.

Formulae finalizations and the work on a hatchery margin (COP) indexing will require contributions from the BC Egg Hatchery Association (BCEHA) and stakeholders noted in the Vaccine Pricing work action plan.

COP Input Updates (including Mechanisms and Efficiencies)

Input	Required for implementation	✓	Required for each pricing period thereafter	✓
Feed	Update surveyed feed prices.	✓	Update surveyed feed prices.	✓
	No change from current practice.	✓	No change from current practice.	✓
Processing Dates	Update lay cycle length based on simple average of the prior period actual processing dates (A178) plus forecasted next period processing dates (A179).	✓	Update lay cycle length based on simple average of the prior period actual processing dates (A1XX) plus forecasted next period processing dates (A1XX+1).	✓
	This is a change to incorporate planned processing dates. <i>See also Post-Submission Analyses</i>		This is a change to incorporate planned dates.	
Breeder Chick Pricing	Cost for the period permitted to be charged by Hatcheries will be set by way of established formulae (see Formula Finalizations).		Cost for the period permitted to be charged by Hatcheries will be set by way of established formulae (see Formula Finalizations).	
	The price included will be an average of four pricing periods that align the current egg production (saleable chicks) to the cost of the breeder chick (e.g., for A179 pricing, average the set cost for periods A176, A175, A174 and A173). This is a change from Hatcheries setting the price to the Commission setting the price using agreed upon formulae with cost verification. <i>See also Post-Submission Analyses</i>	✓	The price included will be an average of four pricing periods that align the current egg production (saleable chicks) to the cost of the breeder chick (e.g., for A1XX pricing, average the set cost for periods A1XX-3, A1XX-4, A1XX-5 and A1XX-6). This is a change from Hatcheries setting the price to the Commission setting the price using agreed upon formulae with cost verification.	~

Vaccine Pricing	<p>Update, by way of indexing, the surveyed vaccine costs following finalization of the Vaccine schedule (and cost sleeve) to determine if a change, higher or lower, is necessary.</p> <p>This is a change to recognize changes in standard vaccines.</p> <p>See also <i>Post-Submission Analyses</i></p>	✓	<p>Update, by way of indexing, the surveyed vaccine costs to the revised cost sleeve when the vaccine update mechanism is employed.</p>	✓
Utilization	No update required.	✓	No update required.	✓
Industry Benefit Index (IBI)	<p>Calculation of the historical levy portion put toward the management of the Official Flock Schedule, and industry initiatives such as SE sampling, blood work programs, and audit verification processes that benefit the entire chicken industry is required.</p>	✓	<p>Re-run the IBI calculation as necessary (when the underlying figures change).</p>	✓
Hatch Average	No update required.	✓	No update required.	✓
Fowl and Breaker Quality Eggs Revenues	<p>For A179, salvage egg revenue will be indexed as the amount per dozen received by Producers is now \$0.75 per dozen (increase from \$0.70 per dozen).</p> <p>Consult on fowl price which was lowered in 2020 due to COVID-related pressures. Re-index fowl price at the current rate received by Producers.</p>	✓	<p>Update the ancillary revenue (return of costs) line as inputs change.</p>	✓
New Costs	No update required.	✓	<p>Should a new cost be experienced before it can be reasonably surveyed as part of the next COP iteration, depending on the manner of the cost (i.e., voluntary vs. involuntary), all relevant information will be forwarded to the Commission PPAC and, if necessary, the BCCMB PPAC.</p> <p>If required, a new COP-line item, or update to an existing COP-line item, will be completed as determinable in the future.</p>	✓
Other Costs Not Specifically Mentioned	Updates to indices as per current practice.	✓	Updates to indices as per current practice.	✓
Saleable Chick Payment	No update required.	✓	No update required.	✓
70% Hatch	No update required.	✓	No update required.	✓

<p>Production Trimming</p>	<p>Finalization of life-of-flock data, receivable from Hatcheries, is required on a 12-month rolling average.</p> <p>The Commission will compile the data and complete the analysis. For A179, flocks with processing dates ending up to the end of A177 will be included, and for 12 months preceding (i.e., August 27, 2022 back to August 28, 2021).</p> <p>To ensure completeness of data (due to hatches being 21 days after the final set), flocks from the current (incomplete) period are not included.</p> <p>See also <i>Post-Submission Analyses</i></p>	<p>✓</p>	<p>Continuation of the process required for implementation.</p> <p>Life-of-flock data for flock A1XX will include flocks from A1XX-2 going back 12 months, inclusive.</p>	<p>✓</p>
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Formula Finalizations

Formula	Update required for implementation	✓	Update(s) required for each pricing period thereafter	✓
<p>Breeder Chick Pricing</p>	<p>Cost for the period permitted to be charged by Hatcheries will be set by way of established formulae.</p> <p>These formulae are with the BCEHA for consultation. All line items require verifiable amounts and a methodology for how and when to update the amount.</p> <ul style="list-style-type: none"> • Breeder company costs (USD) <ul style="list-style-type: none"> ○ How to account for breed mix as selected by the Hatcheries. • Breeder company services and/or vaccines (USD) • Foreign exchange • Other costs (local to the hatcheries such as brokerage, blood work, lab testing or any other noted amounts) • Removal of breeder chick margin (translated instead into saleable chick hatchery margin increase) <p>This may require information to be forwarded directly from breeder companies to complete the verification process.</p>	<p>✓</p>	<p>Re-running the formulae using the agreed upon inputs with costs that are verifiable to set the price permitted to be charged by Hatcheries to Producers.</p> <p>This then flows into the Breeder Chick Pricing noted above (see <i>COP Input Updates (including Mechanisms and Efficiencies)</i>)</p> <p>The established formulae are subject to regular updates which may include the three data points which currently require further substantiation.</p>	<p>~</p>

	<p>As noted under the A177 period of the Implementation Schedule:</p> <p>BCEHA provided information concerning two data inputs on August 22 following further extension. Three other data points require further substantiation before inclusion.</p> <p>BCEHA letter dated September 14 requested discussion on Hatchery COP. The Commission requested a meeting on breeder chick finalization and Hatchery COP for September 29; BCEHA declined to attend.</p> <p>Discussions held between Commission and BCEHA representatives the weeks of October 3 and October 10. Further input received on formula. Draft final reviewed at meeting on October 14. Key inputs will be updated each pricing cycle per agreed upon formula. No further information received as of October 17; draft price set in accordance with formula and forwarded to PPAC.</p> <p>Adjustments as follows:</p> <ul style="list-style-type: none"> - Updates, as contemplated under the March 4, 2022 submission include breed mix and market share, breeder company services and/or vaccines, removal of breeder chick margin (translated into saleable chick as part of the hatchery margin increase) - Other updates: Foreign exchange – the formula will use the Bank of Canada monthly interest rate <u>plus</u> an estimated ‘buy’ sleeve to reflect that the BoC rate is a mid-point rate. The ‘buy’ sleeve was estimated using the average of five financial institution’s buy-sell spread at one-half. This better reflects actual costs incurred by hatcheries and was a potential 	
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	<p>methodology in the March 4, 2022 submission.</p> <p>Other costs include Delivery costs, and Bloods/SE sampling expenses. The Commission reasonably estimated these costs which include time, labour rate and fuel / maintenance.</p> <p>Administration costs, brokerage costs, and veterinarian services remain nil at this point, but are part of the formula with inclusion subject to receipt and verification of data for reasonableness.</p> <p><i>See also Post-Submission Analyses</i></p>		
<p>Vaccine Pricing</p>	<p>No update required until the vaccine schedule and cost sleeve are determined, per the work action plan.</p>	<p>Update the components of the cost sleeve as required from time-to-time, based on the process established in the work action plan.</p> <p>▼</p> <p>This then flows into the Vaccine Pricing noted above (see <i>COP Input Updates (including Mechanisms and Efficiencies)</i>)</p>	<p>▼</p>

Hatchery COP

Input	Update required for implementation	Update(s) required for each pricing period thereafter
Hatchery Margin – Annual Changes	<p>Begin establishing a benchmark of major costs (e.g., hydro and labour) to permit future indexing of the Hatchery Margin.</p> <p>As noted under the A177 period of the Implementation Schedule:</p> <p>BCEHA letter dated September 14 requested discussion on Hatchery COP. The Commission requested a meeting on breeder chick finalization and Hatchery COP for September 29; BCEHA declined to attend.</p> <p>Concern raised at the October 3, 2022 PPAC meeting by BCEHA that the hatchery margin increase of 3.0 cents does not incorporate current price increases and would lock-in that margin at today’s costs. Price increases on all parties were acknowledged by the Chair and steps will be taken in this future hatchery COP work to address this concern.</p> <p>Further discussion with BCEHA on October 14 on the hatchery COP in conjunction with further input on the draft final breeder chick price.</p>	<p>Re-running the benchmarked costs, verified by a third-party, and applying the updated hatchery margin, if any, on a schedule following consultation with PPAC.</p>

In addition to the above, the Commission preliminary identifies these inputs as areas of ongoing work that will be of use in the next iteration of the Hatching Egg COP:

Next Iteration of the Hatching Egg COP

Input	Update required for implementation	Update(s) required for each pricing period thereafter
Labour costs	No update required.	<p>Begin providing timesheets for Producers to record hours. This is a recommendation coming forward from the third-party COP review for the next iteration of the COP.</p>
Other costs	No update required.	<p>Review key elements of the COP and any advice received from PPAC or other stakeholders which may indicate further survey data is needed and/or a change in the methodology employed (e.g., labour costing, per above).</p>

Reports

Beyond the implementation progress report required by BCFIRB, the Commission aims to establish a report with price setting data and analysis to PPAC – an evolution of the current practice under Linkage. Through this report the Commission will monitor implementation impacts on hatching egg producers and hatcheries, as well as, through the Chicken Board, on chicken growers and processors.

This report is also anticipated to indicate the percentage at which an efficient producer receives their full costs back – the effect of the Production Trimming efficiency.

It is expected this report will change over time based upon the advice of the users of the report.

Stakeholder Engagement

Continuing the consultation and engagement that embodied the Roundtables of the Supervisory Review is of importance to the Commission. Key elements (updates, finalizations, reporting) will require various stakeholders' advice and the Commission anticipates continuing to receive such advice which is incumbent upon all participants in a regulated industry.

Post-Submission Analyses

This section is for continued analyses of the new (2020) COP in comparison to the Linkage-based COP.

Certain data may have been previously presented in the March 30, 2022 post-submission report submitted to BCFIRB and made available on the BCBHEC-BCCMB Pricing website.

New (2020) COP versus Linkage-based COP Pricing

A173	Base New (2020) COP	Current Lay Cycle*	Target Lay Cycle*
Lay cycle (weeks)	56.1	58	58
Equivalent (\$/doz)	\$6.8217	\$6.5988	\$6.5988
Equivalent (per chick)	\$0.7106	\$0.6874	\$0.6874
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9000	\$0.8768	\$0.8768
Recovery	100%	100%	100%
v. A173 Linkage price (\$0.6681)	-	97.2%	-

* No other variables changed

A174	Base New (2020) COP	Current Lay Cycle*	Target Lay Cycle*
Lay cycle (weeks)	56.1	58	58
Equivalent (\$/doz)	\$6.9859	\$6.7567	\$6.7567
Equivalent (per chick)	\$0.7277	\$0.7038	\$0.7038
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9171	\$0.8932	\$0.8932
Recovery	100%	100%	100%
v. A174 Linkage price (\$0.6782)	-	96.4%	-

* No other variables changed

A175	Base New (2020) COP	Current Lay Cycle*	Target Lay Cycle*
Lay cycle (weeks)	56.1	60	58
Equivalent (\$/doz)	\$7.2035	\$6.7603	\$6.9674
Equivalent (per chick)	\$0.7504	\$0.7042	\$0.7258
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9398	\$0.8936	\$0.9152
Recovery	100%	100%	100%
v. A175 Linkage price (\$0.7023)†	-	99.7%	-

* No other variables changed † BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase)

A176	Base New (2020) COP	Current Lay Cycle*	Target Lay Cycle*
Lay cycle (weeks)	56.1	60	58
Equivalent (\$/doz)	\$7.3550	\$6.9027	\$7.1141
Equivalent (per chick)	\$0.7661	\$0.7190	\$0.7411
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9555	\$0.9084	\$0.9305
Recovery	100%	100%	100%
v. A176 Linkage price (\$0.7269)†	-	101.1%	-

* No other variables changed † BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase)

A177	Base New (2020) COP	Current Lay Cycle*	Target Lay Cycle*
Lay cycle (weeks)	56.1	61	58
Equivalent (\$/doz)	\$7.4911	\$6.9364	\$7.2459
Equivalent (per chick)	\$0.7803	\$0.7225	\$0.7548
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9697	\$0.9119	\$0.9442
Recovery	100%	100%	100%
v. A177 Linkage price (\$0.7341)†	-	101.6%	-

* No other variables changed † BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase)

A178	Base New (2020) COP	Current Lay Cycle*	Target Lay Cycle*
Lay cycle (weeks)	56.1	61	58
Equivalent (\$/doz)	\$7.6708	\$7.1027	\$7.4196
Equivalent (per chick)	\$0.7990	\$0.7399	\$0.7729
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9884	\$0.9293	\$0.9623
Recovery	100%	100%	100%
v. A178 Linkage price (\$0.7349)‡	-	99.3%	-

* No other variables changed ‡ BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase) and weight category change (decrease in live weight price of 2.0¢/kg).

Price	A173	A174	A175	A176	A177	A178
New (2020) COP, Per S.C.	\$0.6874	\$0.7038	\$0.7042	\$0.7190	\$0.7225	\$0.7399
Linkage-COP, per S.C.	\$0.6681	\$0.6782	\$0.7023†	\$0.7269†	\$0.7341†	\$0.7349‡
Difference	(\$0.0193) (1.93¢)	(\$0.0256) (2.56¢)	(\$0.0019) (0.19¢)	\$0.0079 0.79¢	\$0.0116 1.16¢	(\$0.0050) (0.50¢)
% Recovery vs. Linkage-COP-derived price	97.2%	96.4%	99.7%	101.1%	101.6%	99.3%

† BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increased)

‡ BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase) and weight category change (decrease in live weight price of 2.0¢/kg).

The comparison, possible by using the same lay cycle length for each period, and holding other variables constant, shows that the New (2020) COP-derived price exceeds the Linkage-COP-derived price in Periods A167 and A172 at 100% recovery. For Periods A168 to A171, the New (2020) COP-derived price is less than the Linkage-COP-derived price at 100% recovery.

The percentage recovery comparison ranges from 97.3% to 102.1%, or a band of 4.8% (1.86¢ deficient to 0.97¢ excessive, or a band of 2.83¢).

For periods A173 and A174, increasing feed prices and an upper guardrail limit caused returns as compared to the Linkage-derived price to decrease below a full return, at 97.2% and 96.4%, respectively. For Period A175, A176, and A177, the preapproval by BCFIRB to change the BC Chicken live price formula (to increase the upper guardrail) in response to escalating feed costs resulted in an increase to the Linkage-derived price and a return of 99.7%, 101.1% and 101.6% when compared. In A178, the BCFIRB preapproval to the use of an adjusted weight category caused the comparative recovery to drop to 99.3%.

Mechanisms Added

To further the analysis, the following table is presented to view the layering in of the mechanisms:

Price per Saleable Chick	A173	A174	A175	A176	A177	A178
New (2020) COP, Per S.C.	\$0.6874	\$0.7038	\$0.7042	\$0.7190	\$0.7225	\$0.7399
Mechanisms						
+/- Feed ¹	-	-	-	-	-	-
+/- Processing dates ²	-	-	-	-	-	-
+/- Breeder chick ³	-	-	-	-	-	-
+/- Vaccine adjustment ⁴	-	-	-	-	-	-
+/- Utilization ⁵	-	-	-	-	-	-
+/- Industry Benefit Index ⁶	\$0.0010	\$0.0010	\$0.0010	\$0.0010	\$0.0010	\$0.0010
+/- Hatch average ⁷	-	-	-	-	-	-
+/- Ancillary revenues ⁸	(\$0.0085)	(\$0.0085)	(\$0.0085)	(\$0.0085)	(\$0.0085)	(\$0.0085)
+/- New costs ⁹	-	-	-	-	-	-
New (2020) COP with Mechanisms	\$0.6799	\$0.6963	\$0.6967	\$0.7115	\$0.7150	\$0.7324

¹ No change to process; no change to price currently.

² Processing date (lay cycle) at 58 weeks in A172. Prices set at the then lay cycle length. No change to price.

³ Potential cost formula change, moving profit margin by hatcheries out of cost and into hatchery margin. No net change to day-old chick price to Growers.

⁴ No final formula or additional cost; no change to price currently.

⁵ Recommended approach as previous; no change to utilization outside of survey period. No change to price currently.

⁶ At the example rate of \$100,000 annually.

⁷ Adjustable once tracking of domestic hatch rates on a per-period basis is available. No change to price currently.

⁸ Estimated at lay cycle at 56.1 weeks.

⁹ Prospective mechanism; no change to price currently.

The New (2020) COP with Mechanisms Price would then have the Production Trimming efficiency applied. It should be noted that with having the efficiencies of Saleable Chick Payment and 70% Hatch in the Consolidated Order, the results of the surveys would have these efficiencies embedded already.

Efficiencies Added

Price per Saleable Chick	A173	A174	A175	A176	A177	A178
New (2020) COP with Mechanisms	\$0.6799	\$0.6963	\$0.6967	\$0.7115	\$0.7150	\$0.7324
Expressed as Recovery of Cost	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Efficiencies						
+/- Saleable Chick Payment	-	-	-	-	-	-
+/- 70% Hatch	-	-	-	-	-	-
+/- Production trimming ²	(\$0.0049)	(\$0.0050)	(\$0.0048)	(\$0.0048)	(\$0.0048)	(\$0.0049)
New (2020) COP w/ Mechanisms & Efficiencies – for Pricing	\$0.6750	\$0.6913	\$0.6919	\$0.7067	\$0.7102	\$0.7275
Expressed as Recovery of Cost	99.3%	99.3%	99.3%	99.3%	99.3%	99.3%

² Periods A173-174 were at a 58-week lay cycle; A175-176 were at a 60-week lay cycle; A177-178 were at a 61-week lay cycle

Comparison – Efficient COP vs. Linkage

Comparing the New (2020) COP Price set at 99.2% to 99.3% recovery:

Price per Saleable Chick	A173	A174	A175	A176	A177	A178
New (2020) COP w/ Mechanisms & Efficiencies – for Pricing	\$0.6750	\$0.6913	\$0.6919	\$0.7067	\$0.7102	\$0.7275
Expressed as Recovery of Cost	99.3%	99.3%	99.3%	99.3%	99.3%	99.3%
Linkage-COP, per S.C.	\$0.6681	\$0.6782	\$0.7023 [†]	\$0.7269 [†]	\$0.7341 [†]	\$0.7349 [†]
Difference	(\$0.0069) (0.69¢)	(\$0.0131) (1.31¢)	\$0.0104 1.04¢	\$0.0202 2.02¢	\$0.0239 2.39¢	\$0.0074 0.74¢
% Recovery of efficient New (2020) COP-derived price* [Linkage vs. New (2020) COP with Mechanisms]	98.3%	97.4%	100.8%	102.9%	103.4%	101.0%
Spread not covered at Expressed Recovery of Cost	1.0%	1.9%	-	-	-	-

*This is not to be confused with recovery parity (e.g., \$0.6681 / \$0.6933 = 96.4%).

[†]BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increased)

From A173, it is shown that the current Linkage-COP-derived price is less than the efficient New (2020) COP-derived price in two of six pricing periods.

Processing Dates

Simple average of lay cycle lengths of current pricing period and next pricing period. It was confirmed that lay cycle length can be input to the half-week. By way of example:

A178 – August 28 to October 22, 2022	60.8 weeks
<u>A179 – October 23 to December, 2022</u>	<u>60.0 weeks</u>
Average	60.4 weeks
<u>COP input</u>	<u>60.5 weeks</u>

Breeder Chick Pricing & Formulae

In the March 4, 2022 Final Proposed COP-Based Pricing Package was a proposed breeder chick pricing formula. Since post-approval implementation work began, the BCEHA has provided some transparency and substantiation to some of the costs previously identified in the formulae. New costs were proposed which may or may not be in keeping with BCFIRB's approval decision. As a result, this formula is still being discussed.

All costs that comprise the breeder chick price that is to be set, by the Commission and anticipated starting in period A179, must be sourced transparently to the Commission. It is understood that certain figures are sensitive and not to be further disseminated; the Commission endeavors to maintain this confidentiality through providing a high-level analysis of changes in breeder chick pricing on a period-by-period basis.

A final draft breeder chick price summary, pending final resolution, is as follows:

BREEDER CHICK PRICING FOR PERIOD A179			
<u>Component</u>	<u>Currency</u>	<u>Female Total</u>	<u>Male Total</u>
Breeder company cost	USD	\$ 8.1695	\$ 11.5976
Services	USD	0.0500	0.0500
Vaccinest†	USD	0.1907	0.2029
Subtotal	USD	\$ 8.4102	\$ 11.8505
Forex rate		1.3719	1.3719
Subtotal	CAD	\$ 11.5380	\$ 16.2577
Other (delivery, bloods/SE)		0.0564	0.0564
Total cost (hatchery selling price)	CAD	\$ 11.5944	\$ 16.3141
Rounded	CAD	\$ 11.59	\$ 16.31

† In ovo; does not include 2 to 20-week vaccine program sleeve

DRAFT summary report to PPAC

The breeder chick price, as a reminder, is both used as the forthcoming period's price that a hatchery can charge producers for their day-old broiler breeder females and males placed, and used in the COP price relating to the eggs and chicks that come from that placement in future.

Per page 80 of the March 4, 2022 Pricing Package submission, the updated table for actuals:

Females:

Period of Original Cost to Producer	Periods cost is brought into COP for pricing purposes									
	...	A175	A176	A177	A178	A179	A180	A181	A182	...
...
A173	...		\$11.08	\$11.08	\$11.08	\$11.08				...
A174	...			\$12.61	\$12.61	\$12.61	\$12.61			...
A175	...				\$12.70	\$12.70	\$12.70	\$12.70		...
A176	...					\$12.70	\$12.70	\$12.70	\$12.70	...
A177	...						\$12.70	\$12.70	\$12.70	...
A178	...							\$12.70	\$12.70	...
A179	...								\$11.59	...
...
AVG	...	\$11.05	\$11.01	\$11.42	\$11.84	\$12.27	\$12.68	\$12.70	\$12.42	...

Males:

Period of Original Cost to Producer	Periods cost is brought into COP for pricing purposes									
	...	A175	A176	A177	A178	A179	A180	A181	A182	...
...
A173	...		\$15.58	\$15.58	\$15.58	\$15.58				...
A174	...			\$17.97	\$17.97	\$17.97	\$17.97			...
A175	...				\$18.12	\$18.12	\$18.12	\$18.12		...
A176	...					\$18.12	\$18.12	\$18.12	\$18.12	...
A177	...						\$18.12	\$18.12	\$18.12	...
A178	...							\$18.12	\$18.12	...
A179	...								\$16.31	...
...
AVG	...	\$15.56	\$15.46	\$16.10	\$16.77	\$17.45	\$18.08	\$18.12	\$17.67	...

Vaccine Pricing

The cost sleeve has been set at \$1.61 per bird, a non-indexed value.

Industry Benefit Index (IBI)

As noted in the March 4, 2022 Final Proposed COP-Based Pricing Package, a compilation is required of the portion of the historical Linkage levy portion used for items that benefit the entire chicken industry. These may include management of the Official Flock Schedule, industry initiatives such as the SE sampling, blood work programs, and audit verification processes (e.g., chick quality concerns).

To that end, the line items below represent such industry betterment costs (as derived from our publicly posted audited financial statements):

Expense	IBI	2021	2020	2019	Estimated Inclusion
Advertising and promotion		5,500	4,850	8,046	-
Amortization		106,812	97,680	78,144	-
Animal Health Lab	✓	77,110	94,690	91,780	95,000
BCBHEP Association		105,126	67,182	141,753	-
BC Poultry Conference		0	3,978	9,413	-
Breaker quality eggs		776,321	569,915	572,125	-
CHEP levy		267,534	292,826	366,442	-
Chairman and members' per diems		139,548	141,516	157,078	-
Disaster-related production management expenses	~	18,000	670,508	0	0
Interest and bank charges		1,780	1,685	1,758	-
Legal and accounting		56,417	60,915	38,001	-
Office and miscellaneous		75,136	71,401	80,847	-
Office rent		58,708	76,987	33,571	-
Pricing expense		53,619	65,080	17,957	-
Professional services		20,725	41,649	26,460	-
Quality assurance expenses	✓	149,722	311,318	721,569	150,000
Research and development, standards, biosecurity		11,993	15,852	37,293	-
SE project expenses	✓	22,639	13,933	15,949	15,000
Telephone		9,179	8,637	8,701	-
Travel		8,664	15,322	66,693	-
Wages and benefits		557,827	528,430	524,000	-
IBI expenses		267,471	1,090,449	829,298	260,000

As shown above, the expenses that may be identified as IBI-related may vary year-to-year. Generally, the Animal Health Lab expense is fairly consistent with the exception of 2021 being lower due to the lab not operating after mid-November due to flooding. Quality assurance, which includes transfer of or removal of product (i.e., disease tools), is budgeted annually but circumstances requiring use of funds are unpredictable.

Therefore, it may be necessary to establish the IBI with two parts:

1. Expenses that are estimable/predictable.
2. Expenses that are variable and are recovered for a duration of time.

In recovering expenses, the second part, the duration should not be so short as to create a significant increase in the price that unduly impacts the supply chain. Given that the Commission has sufficient and appropriate financial tools and resources at hand, the impact could be mitigated through a longer recovery period.

It is also noted that producers have flocks that enter and cease production at varying points of the year (e.g., all-in, all-out versus multiple flocks per year) and have paid into the levy for which a portion pays for these IBI-related expenses.

As shown in the table, it is estimated the IBI will be set at \$260,000, recovered on annually. With the final CHEP allocation for 2022 set at 123,999,730 hatching eggs, the recovery is provisionally set at \$0.0252 per dozen (0.2621¢ per saleable chick based on an 80% saleable rate). Based on the nature of it being an estimate based on recent actuals, the IBI should be reviewed each pricing period by the Board and advice sought from PPAC for any proposed adjustments.

Production Trimming

To provide for an efficiency factor within the COP surveys, upon which the COP price is based, a trimmed average of 5%, both top and bottom, of the total data sets of flocks that finished producing is required.

The surveys with the first pullet placement moving into the lay barn was January 1, 2019 and the last lay birds pulled from a barn was October 3, 2020. This is the summary information as provided by Serecon Inc. as the Commission is not privy to actual surveyed results to maintain confidentiality.

Therefore, based on life-of-flock data housed by the Commission, provided by way of the hatcheries, eggs/hen figures are as follows:

Period	Timeframe	Eggs/hen to 60 weeks	Compared to Survey Period
Survey Period	Placed 2019-01-01 to Processed 2020-10-03	141.19	-
Rolling One-Year (Current Production)	2021-08-28 to 2022-08-27	139.44	(1.75 eggs/hen) (1.24%)
Rolling One-Year Trimmed (Current Production)	2021-08-28 to 2022-08-27	144.15	2.96 eggs/hen 2.10%

By way of example, the A178 period can be viewed with the eggs/hen as during the survey period, the rolling one-year preceding the current pricing period, and the rolling one-year preceding the current pricing period with trimming:

A178	Survey Period (Surveyed Production)	Rolling One-Year (Current Production decrease of 1.24%)	Rolling One-Year Trimmed (Current Production increase of 2.10%)
	<i>Full Price...</i>	<i>...At Current Production...</i>	<i>...Trimmed</i>
Lay cycle (weeks)	61	61	61
Equivalent (\$/doz)	\$7.1027	\$7.1909	\$6.9535
Equivalent (per chick)	\$0.7399	\$0.7491	\$0.7243
Hatchery margin (fixed)	\$0.1894	\$0.1894	\$0.1894
Day-old (per chick)	\$0.9293	\$0.9385	\$0.9137
Recovery	100%	101.24%	97.90%
v. A178 Linkage price (\$0.7349)‡	99.3%	98.1%	101.5%

This shows that although production (eggs/hen) has decreased since the survey period by 1.75 eggs per hen (1.24%), the production trimming offsets this through the removal of the bottom and top 5% of flocks and yields an increase of 2.96 eggs per hen (2.10%) versus the survey period.

Applying this efficiency of 2.10% to the most available COP pricing yields the following:

A178	Base New (2020) COP	Production Trimming efficiency added (2.10%)	Change
Lay cycle (weeks)	56.1	56.1	-
Equivalent (\$/doz)	\$7.6708	\$7.5097	(\$0.1611)
Equivalent (per chick)	\$0.7990	\$0.7822	(\$0.0168)
Hatchery margin (fixed)	\$0.1894	\$0.1894	-
Day-old (per chick)	\$0.9884	\$0.9716	(\$0.0168)
Recovery	100%	97.90%	(2.10%)

A178	Current Lay Cycle*	Production Trimming efficiency added (2.10%)	Change
Lay cycle (weeks)	61	61	-
Equivalent (\$/doz)	\$7.1027	\$6.9535	(\$0.1492)
Equivalent (per chick)	\$0.7399	\$0.7243	(\$0.0156)
Hatchery margin (fixed)	\$0.1894	\$0.1894	-
Day-old (per chick)	\$0.9293	\$0.9137	(\$0.0156)
Recovery	100%	97.90%	(2.10%)
v. A178 Linkage price (\$0.7349)‡	99.3%	101.5%	2.2%

A178	Target Lay Cycle*	Production Trimming efficiency added (2.10%)	Change
Lay cycle (weeks)	58	58	-
Equivalent (\$/doz)	\$7.4196	\$7.2638	(\$0.1558)
Equivalent (per chick)	\$0.7729	\$0.7566	(\$0.0163)
Hatchery margin (fixed)	\$0.1894	\$0.1894	-
Day-old (per chick)	\$0.9623	\$0.9460	(\$0.0163)
Recovery	100%	97.90%	(2.10%)

* No other variables changed ‡ BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase) and weight category change (decrease in live weight price of 2.0¢/kg).

The Commission aims to provide PPAC with information in each pricing period package that incorporates the production trimming, alongside the ceiling to the price as permitted under the graduated or phase-in schedule (i.e., the ceiling of 95.0% for A179).

Period A179 Pricing Report to PPAC

Dates

Pricing Element	Start Date	End Date
Breeder Chicks	October 23, 2022	December 17, 2022
Hatching Eggs	October 23, 2022	December 17, 2022
Saleable Chicks*	November 13, 2022	January 7, 2022
Day-Old Broiler Chick*	November 13, 2022	January 7, 2022

*Set three weeks after the hatching egg pickup

Key COP Inputs

Input	Current (A179) *COP-based	Previous (A178) *Linkage-based	Change
Lay cycle length	60.5 weeks	61.0 weeks	▼ (0.5) weeks
Vaccine pricing (sleeve)	\$1.61 / bird	\$1.45 / bird	▲ \$0.16 / bird
Industry Benefit Index	\$0.0252 / dozen or 0.2621¢ / saleable chick	Not included previously	▲ \$0.0252 / dozen or 0.2621¢ / saleable chick

Production Trimming

Period	Timeframe	Eggs/hen to 60 weeks	Compared to Survey Period
Survey Period	Placed 2019-01-01 to Processed 2020-10-03	141.19	-
Rolling One-Year (Current Production)	2021-08-28 to 2022-08-27	139.44	(1.75 eggs/hen) (1.24%)
Rolling One-Year Trimmed (Current Production)	2021-08-28 to 2022-08-27	144.15	2.96 eggs/hen 2.10%

Breeder Chick Price

Component	Currency	Female	Male
Breeder company cost	USD	\$8.1695	\$11.5976
Services	USD	0.0500	0.0500
Vaccines†	USD	0.1907	0.2029
Subtotal	USD	\$8.4102	\$11.8505
Forex rate		1.3719	1.3719
Subtotal	CAD	\$11.5380	\$16.2577
Other (delivery, bloods / SE)	CAD	0.0564	0.0564
Total	CAD	\$11.5944	\$16.3141
Rounded	CAD	\$11.59	\$16.31

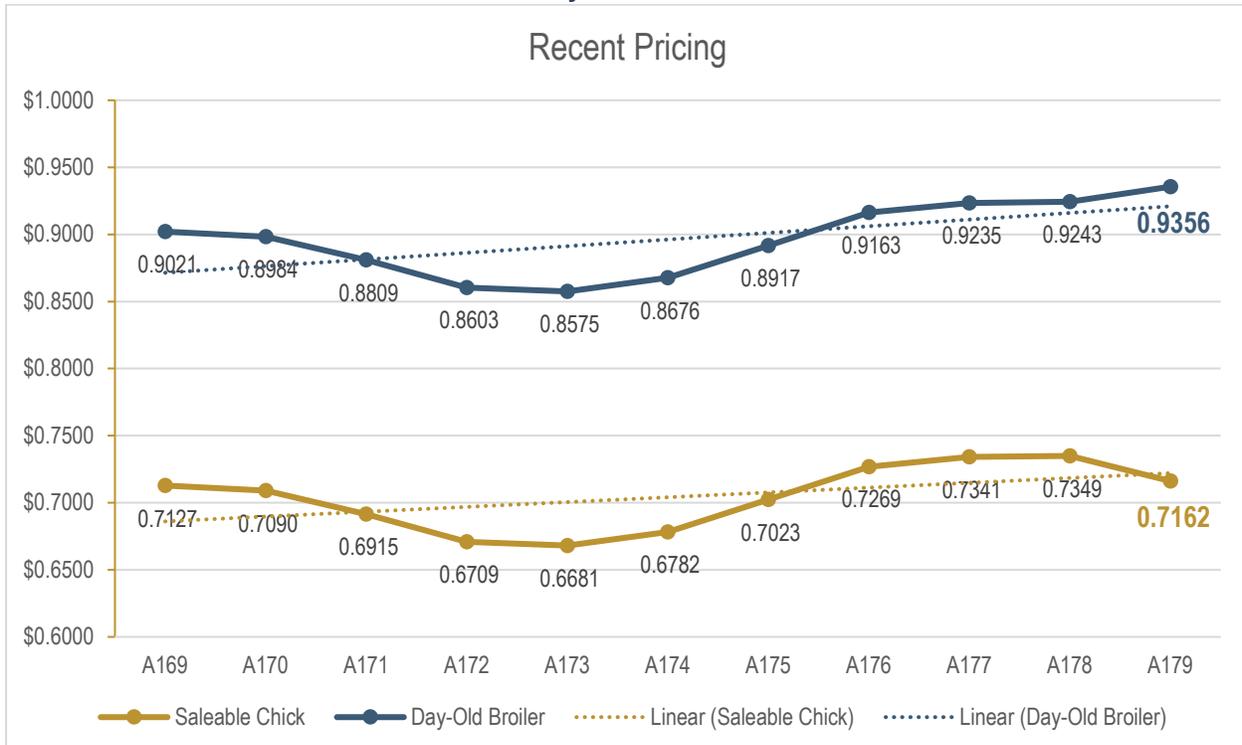
† In ovo; does not include 2 to 20-week vaccine program sleeve

Hatching Eggs, Saleable Chicks & Day-Old Broiler Chicks

A179	Survey Period (Surveyed Production)	Rolling One-Year (Current Production decrease of 1.24%)	Price set at lower of:	
			Rolling One-Year Trimmed (Current Production increase of 2.10%)	Phase-in Step
	<i>Full Price...</i>	<i>...At Current Production...</i>	<i>...Trimmed</i>	Step 1 at 95.0%
Lay cycle (weeks)	60.5	60.5	60.5	60.5
Equivalent (\$/doz)	\$7.2377	\$7.3274	\$7.0857	\$6.8758
Equivalent (per chick)	\$0.7565	\$0.7633	\$0.7381	\$0.7162
Hatchery margin (fixed)	\$0.2194	\$0.2194	\$0.2194	\$0.2194
Day-old (per chick)	\$0.9759	\$0.9827	\$0.9575	\$0.9356
Recovery	100%	101.24%	97.90%	95.00%
v. A179 Linkage price (\$0.7451)‡	98.5%	97.6%	100.9%	n/a

‡ BCFIRB preapproval of BC Chicken live price formula change granted (upper guardrail increase) and weight category change (decrease in live weight price of 2.0¢/kg). This comparison is required for two pricing periods post implementation (i.e., A179 and A180) per the June 3, 2022 BCFIRB decision – users are cautioned the Linkage-based price relies upon the previous COP surveys and that the Saleable Chick price uses the former \$0.1894 hatchery margin yielding a day-old price of \$0.9345 per chick.

Saleable Chick and Broiler Chick Price History



The hatchery margin, the difference between the day-old broiler chick price and the saleable chick price was \$0.1894 for periods A169-A178. Starting A179, the hatchery margin is \$0.2194.