Listening to consumers

During this winter, the media have made harsh criticism and accusations concerning the use of palm oil-derived supplements in cows' diets.

Although we explained that this was a by-product of food for humans, that it adds value, and that its use has always been in compliance with government standards, its use in dairy farming nevertheless generated substantial consumer reactions. Consumers were not interested in these nuances. Some are already seeking to eliminate palm oil from their diet due to its environmental impact. Others have also reacted to messaging and comments that cast doubt on our practices and the quality of our dairy products.

With the growing concerns about the environment and animal welfare, consumers are increasingly critical and selective about the products they consume. They are demanding, have expectations, and make choices that are based on their values and ideologies. They question food sources, assess quality, compare products, and expect best practices. More than ever, we must take these consumer trends into account to remain competitive and grow, because consumer behaviour is evolving rapidly. Times have changed. The era when price was the only decision-making factor for many consumers is long gone. According to experts in the field, the decision whether or not to buy a product depends both on rational factors, such as price and quality, and irrational factors, such as emotion and perception. They also advise that to create a lasting attachment and build a relationship of trust with our consumers, we must truly listen to them and meet their expectations.

Our organization has taken this issue very seriously. The status quo was no longer an option; it would have eroded public confidence in our industry and our products, a losing situation for all of us. It was our responsibility to respond quickly and take concerted and meaningful action to show that we are listening. This is why we have asked farmers to stop using products containing palm oil-derived supplements in cattle feed. This decision was certainly made quickly, but it was also a continuation of similar initiatives that had already begun. An example is our investment in research, including the search for alternatives to manage cows' lack of energy at the beginning of their lactation. We have also invested substantial efforts in the development of tools such as ProfiLab, which help obtain a better fatty acid profile. Finally, our payment policy, which will begin on August 1, 2021, was developed with the objective of not introducing changes to the profile of milk components, tangible proof of our existing commitment to remove these supplements from our cows' diet.

This new way of doing things, like any change, is certainly leading to a period of uncertainty. However, we must bear in mind that concerted collaborative action by all farmers and the industry at large will enable us to meet the challenges in adapting to this new reality. This is why we asked the feed manufacturers to adjust their recipes and engaged agricultural consultants to support us in these changes. Our organization, the Association québécoise des industries de nutrition animale et céréalière (AQINAC) and Lactanet have

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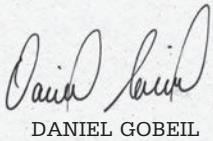
begun pan-industry work to enable farmers to meet these consumer expectations. We must be accepting of consultants' expertise. They are there to help us adjust. We will also remain informed on the findings of the expert committee on the issue, which was set up by Dairy Farmers of Canada. Its work has already begun.

Farmers have listened to consumers and launched initiatives to support alternatives. However, the debate on the use of palm oil is not limited to the dairy industry. We expect that the entire food industry will address the question, since palm oil is widely used in the human diet. The government and the processors must be consistent in their actions. They must apply reciprocity of standards to all imported dairy products and ingredients. Discussions are in progress and we will ensure that our voice is heard on this issue.

We are facing a major challenge: to maintain consumer confidence in our profession and our product. Consumers have a clear and unequivocal position. They don't want palm oil-derived supplements to be used in dairy farming. It is up to our organization, as well as each of us, to be proactive and take the lead. Our proAction certification program gives us the means to implement concrete continuous improvement efforts. We can reassure the public that our livestock and environmental management practices are healthy and responsible and convince them that we are committed to practicing sustainable production of high-quality, safe, and nutritious food.

In implementing each of the issues and decisions made by the Board of Directors, the elected officers are remaining faithful to the organization's mission: *To bring together Quebec milk producers by providing leadership in marketing high-quality milk, which meets the expectations of society, and to ensure the sustainable development of dairy farms*. This is what guided us when we decided to stop using palm oil-derived supplements in our cattle feed. The decision to take a leadership position on this issue has been recognized. We can be proud that we listen to our consumers and demonstrate our commitment to always strive to do better.



DANIEL GOBEIL
Chairman

What if we captured carbon?

By ANDRÉ PIETTE, journalist

The soil is the planet's second largest carbon sink after the oceans. Farmers could convert this resource into business opportunities, but they will first have to meet various challenges.

Dairy farmers have the option to go beyond simply reducing their greenhouse gas (GHG) emissions and commit to carbon sequestration. The unharvested roots of plants and stems represent carbon extracted from the atmosphere and retained in the soil. Many observers believe that agriculture could become a major player in GHG reduction by sequestering more carbon.

How can they do this? The various techniques for capturing carbon in the soil are known. Here are some examples. When row crops such as corn are cultivated and tilled repeatedly, the soil stores only small amounts of carbon and can even release it. But if tilling is replaced by minimal cultivation methods, sequestration is intensified. If cover crops are also adopted, sequestration is further amplified. And if rotation is extended by inserting perennial fodder crops, the effect is even greater.

ADDING VALUE TO CAPTURED CARBON

Carbon credits, also known as offset credits, are the simplest way to add value to sequestered carbon. The mechanism is straightforward: a company takes specific measures to reduce its GHG emissions. Once the reduction is certified, it sells the accumulated carbon credits to another company that wants to improve its carbon footprint.

Will farmers soon sell carbon credits on the market when they sell their crops? This is already a reality in some parts of the world. In Alberta, for example, shifting from tillage to direct seeding (no-till) can provide carbon credits ranging from 0.15 to 0.27 tonne of CO_2 equivalent (CO_2e) per hectare, depending on the location.

In Québec, it is currently impossible to sell carbon credits for the simple reason that an offset credit protocol has not yet been established for carbon sequestration in the soil.

Such a protocol is the cornerstone of the approach. Every carbon credit project is based on a protocol. Developed by the government, it defines in detail what practices will generate credits, under what conditions and in what quantity. "We must ensure that one tonne of carbon avoided or sequestered is worth as much as the tonne of emissions we want to offset," explains Nathan De Baets, a Québec consultant in management of greenhouse gases. He adds that preparing a protocol for agriculture is often complex due to the multiple factors involved, such as the climate, the type of crop and the type of soil. "Developing a protocol for recovery of refrigerator gases is a lot simpler," he points out.

To be credible, a protocol must be based on sound scientific data. The Conservation Cropping Protocol developed by the Alberta Government lists multiple research projects on which it is based.

In Québec, a single agriculture-related protocol currently exists. It concerns the rehabilitation of a manure pit (with the aim of methane destruction). In its future plans, the Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC) prioritizes two other agricultural streams: biomethanization and improvement of fertilizer spreading practices.

ANTICIPATED COSTS

The adoption of a protocol does not, however, guarantee that farmers will choose to adopt carbon sequestration. Given the current state of the carbon market, it is unlikely to be profitable. "In agriculture, the cost (of avoidance) of carbon is often higher than the carbon credit," concludes Nathan De Baets, who has participated in several projects in North America and Europe. "There are many charlatans in this field," he warns.

An offset credit project incurs costs. First and foremost, it must respect the additionality principle. "An additional GHG reduction is a GHG emissions reduction that did not occur in the normal course of business," the MELCC explains. "It is a GHG emissions reduction that would not have happened without an additional contributing action." An example is a row-crop farmer who adds three years of hay to his rotation, knowing that this crop will generate less revenue than corn or soybeans.

Furthermore, developing a project and having it certified by the competent authorities will probably require the assistance of a specialist. Once accepted, it will require periodic verification by an independent body, all at the developer's expense.

However, it would be possible to mitigate these costs by adopting an aggregation approach. Combining several similar projects opens the door to efficiency gains in areas such as the preparation of the application for approval or during audits.

PERMANENCE

Another potentially demanding challenge is compliance with the permanence principle. In theory, an emissions reduction should not be reversible. A carbon credit generator should expect to provide guarantees of longevity. For example, last year in France, in a collective project established by the France Carbone Agri association, the 391 participating ruminant farmers made a five-year commitment. In another collective project developed in France, the contract extended over seven years.

One last challenge is posed by the small size of agricultural projects. An Alberta farmer who converts 500 hectares to direct seeding will sequester 135 tonnes of CO_2e per year. "A company like Alcoa, with emissions of hundreds of thousands of tonnes, isn't interested in buying small quantities," says Daniel Bernier, an agronomist with the UPA's Agricultural Research and Policy Directorate. However, aggregation is again a potential solution. Some companies specialize in combining similar projects to be able to offer large quantities of carbon credits to major buyers. But nothing comes for free! In Alberta, a farmer doing business with an aggregator must expect to forego about one third of the revenue from the sale of offset credits.

WILL IT BE PROFITABLE?

Each farmer has to decide whether it would be financially justifiable to undertake a carbon sequestration project under these conditions. However, these figures provide some context. In Québec, the minimum price of one unit of emissions during auctions conducted in 2021 under the Québec cap-and-trade system for GHG emission allowances is $17.36. If we take the Alberta carbon efficiency of 0.27 tonne CO_2e per hectare as a reference, a farmer who allocates 500 hectares to a project would derive a gross annual revenue of only $2,344. However, the price of carbon may rise. In the France Carbone Agri project, for example, the floor price was set at 30 euros, or $46 CAD!

Other avenues seem more promising than carbon sequestration in the short term. Daniel Bernier suggests nitrogen fertilization. "Under wet conditions, a portion of the nitrogen returns to the atmosphere in the form of nitrous oxide, a powerful greenhouse gas," he explains. "By using diagnostic tools and fractionating, nitrogen can be applied more efficiently. I wouldn't be surprised if an optimization protocol is developed soon for nitrogen fertilization."

Nathan De Baets is very hopeful about the potential of reduction of enteric fermentation. "Tools are in development," he says. "For example, one tool being developed measures enteric emissions by analyzing milk."

It is also possible that farms could fight GHG without having to follow the laborious protocol route. "The government could simply offer a financial incentive to stimulate the adoption of certain measures, such as the use of food additives or cultivation of cover crops," says Daniel Bernier. "Such an approach would probably have the merit of delivering quick results." ■

Centralized Quota Sales System (SCVQ)

FEBRUARY 2021 — Fixed Price: $24,000.00

	Number	kg of BF/day
Offers to sell		
Total	31	379.59
Eligible for allocation	31	379.59
Successful	31	379.59
Reserve		
Quantity purchased (-) / sold (+)		+1.09
Offers to buy		
Total	1,879	19,826.97
Eligible for allocation	1,879	19,826.97
Successful	1,879	380.68

Participation on a prorata basis in any unprocessed purchase offers of 0.55 kg of BF/day or higher.

After the sale, the balance of quantities available for regional priorities is 59.34 kg of BF/day for Gaspésie-Les Iles and 0.00 kg of BF/day for Abitibi-Témiscamingue.

ALLOCATION OF OFFERS TO SELL AND TO PURCHASE PER PRICE STRATUM

SALES				PURCHASES		
Number	kg of BF/day	Cumulation	Price offered $/kg of BF/day	Number	kg of BF/day	Cumulation
			< 24,000.00			
31	379.59	379.59	**24,000.00 ceiling price**	1,879	19,826.97	19,826.97

ALLOCATION TO BUYERS AND SELLERS

	Buyers	Number	kg of BF/day	%
PRIORITY	Startup Assistance Program	0	0.00	0.0
PRIORITY	Holding of less than 12 kg of BF/day	1	1.00	0.3
	Reimbursement of startup loans	23	2.30	0.6
	Regional priority	1	0.10	0.0
	Iteration (0.1 kg of BF/day)	1,877	187.70	49.3
	Prorata (0.97%)	1,841	189.58	49.8
	1.92% of the offers have been processed		**380.68**	**100.0**

Sellers	Number	kg of BF/day	%
Seller who stopped producing 1 or more month ago	0	0.00	0.0
Offers partially processed in the previous month	0	0.00	0.0
Offers in the current month	31	379.59	100.0
100.00% of the offers have been processed	**31**	**379.59**	**100.0**

Quota prices in Canadian provinces JANUARY 2021

	$/kg of BF/day		$/kg of BF/day		$/kg of BF/day
Nova Scotia	24,000 ceiling	**Quebec**	24,000 ceiling	**Alberta**	44,350
Prince Edward Island	24,000 ceiling	**Ontario**	24,000 ceiling	**Saskatchewan**	30,500
New Brunswick	24,000 ceiling	**Manitoba**	34,500	**British Columbia**	36,500