Protein, Performance & Sustainability: Turning Change into

The Next Era of the Milk Cheque: Protein, Volume, and Balance

Iain Haig – Head of Dairy + Wholesale Ritchie-Smith Feeds

For decades, Western Canadian dairy producers have operated in a system built around butterfat and the lack of sufficient milk processing capacity. Quota, nutrition programs, genetics and even conversations around cow efficiency have largely revolved around producing kilograms of fat as efficiently as possible. However, the wider Western Milk Pool now suggests the industry is entering a new era – one where protein production, milk volume and component balance may become the next frontier of profitability.

Far from framing the April 2026 changes as a threat, the outlook presents overwhelming optimism: producers who understand the direction of the market and adapt proactively may unlock substantial opportunity over the next number of years.

The numbers already tell an important story.

Since 2012, BC dairy producers have dramatically increased butterfat concentration. Average butterfat concentrations have climbed from roughly 3.84% to more than 4.50%. The shift accelerated after the 2017 component pricing changes, when the pay structure moved to an 85:10:5 structure, emphasizing fat as the primary goal.

Producers responded exactly as good business operators do: they pivoted production strategies toward the signals being sent by the payment system. Genetics, nutrition and management all evolved to maximize fat production per cow. The result has been remarkable efficiency. Today, BC producers can generate a kilogram of butterfat with 4.5 fewer litres of milk than they did 12 years ago. That represents a major achievement in dairy management and nutritional precision.

However, this same success may now be exposing a new limitation within the system. While fat concentration has surged, protein concentration has increased only modestly. More importantly, milk volume per kilogram of quota produced has steadily declined. That matters because protein yield is fundamentally tied to volume.

In simple terms, a cow producing more milk has far greater opportunity to ship kilograms of protein, even if protein percentage is slightly lower. A cow producing 40 litres of milk at a 3.20% protein still produces substantially more protein than a 30-litre cow at 3.30%.

This distinction could become increasingly important as milk payment models continue evolving. The April 2026 transition to a 70:25:5 milk component pricing structure signals that protein will become more economically influential within the milk cheque as a result of protein demand from current

and new processors. For producers who have spent years optimizing strictly around butterfat, this creates both a challenge and a significant opportunity.

This pricing shift better aligns producer incentives with what processors currently value.

The next step is understanding how nutrition and management can unlock greater protein yield without sacrificing cow health or profitability. At the centre of this is rumen function. The rumen remains the engine driving component production, and future success may depend less on feeding high crude protein diets and more on maximising rumen efficiency and microbial protein synthesis.

The notion that crude protein alone drives milk protein is false.

Instead, highly fermentable carbohydrates with a balanced supply of soluble and degradable protein, to optimise microbial protein production, are the true drivers. Rumen microbes convert nitrogen and energy into microbial protein, which ultimately supplies over half of the cow's metabolizable protein requirements (the form a cow can digest). The remaining protein requirements come from rumen-undegradable protein sources, commonly referred to as by-pass protein, such as protected soy and canola products, and animal by-products being the richest sources to utilize. Attention should also be on amino acid balancing, particularly lysine and methionine, the two most limiting in dairy cow diets, as tools to maximize milk component yield.

That transition does not simply depend on ration formulation. Management remains critical. Cow comfort, lying time, water access, heat abatement and rumen stability are all essential pillars of future profitability. High-producing cows need consistent feed intake, stable rumen pH and excellent environmental management to sustain both milk volume and component production.

But perhaps the most important concept to note: *volume matters.*

For years, many producers have viewed lower milk volume as a sign of efficiency because quota could be filled with fewer litres shipped, given the high fat percentages in the milk shipped. Freight savings and high component concentration reinforced this thinking. Yet under a system placing greater emphasis on protein, *minimizing volume may limit revenue potential*.

Economic examples can demonstrate how farms emphasizing moderate fat levels alongside higher milk volume and greater protein yield could economically outperform herds focused solely on extreme fat concentration. In some scenarios, relatively small shifts in component strategy translated into several thousand dollars per month in additional revenue on an average-sized dairy. For example, Farm A with 5% butterfat, 3.45% protein and 5.93% OS generates $19.37/Kg NET revenue (Net of freight, levies and adjustments) pre-April 1, 2026. That same farm will reduce revenue per Kg to $19.15 in April on the new 70:25:5 structure. On a 300kg CDQ dairy operation, this means lost revenue opportunity of $2,013/month. This is the impact of not making any strategic changes in on-farm strategy, from old to new pay structure.

Compare this same 5% fat herd to Farm B, at 4.25% fat and 3.3% protein. Clearly more volume must be produced to ship the same CDQ but filling quota at the lower fat % yields $4,483/month more revenue (numbers calculated using January 2026 provincial averages). This is a substantial revenue difference now and will only increase should the province increase the percentage weighted to protein. The critical piece here is Farm B is shipping more grams of protein for each Kg fat shipped.

Equally important, these gains can be seen without assuming increases in feed costs. This philosophy may require a mindset shift across parts of the industry. For years, dairies have celebrated producing quota with fewer cows, more fat per cow and lower shipped volume. However, going forward, the more profitable question may instead become: how much protein can be produced per kilogram of quota?

Additionally, many producers need to rethink forage priorities. Highly digestible corn silage and grass silage may provide greater value than simply chasing tonnage or excessively high crude protein forage numbers.

Western Canadian dairy producers have repeatedly demonstrated an ability to respond successfully to changing market signals. The rapid increase in butterfat concentration over the past decade is proof of that capability. If the industry now begins rewarding protein production more aggressively, there is every reason to believe producers can adapt once again.

Most importantly, the changes ahead do not need to be viewed with fear. For progressive dairies willing to embrace evolving milk payment models, focus on rumen efficiency and prioritize protein yield per Kg CDQ, alongside total fat production, the future may offer meaningful financial upside. In a period where beef sales are accounting for 10% of the gross milk cheque, further emphasises that milking more cows could once again be a more profitable route in BC dairy farming. The producers who succeed will likely be those who surround themselves with strong nutritional, veterinary and management teams while remaining open to new thinking.

Change is undoubtedly coming to Western Canadian dairying, and for many farms, that change may represent the next major opportunity.

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Making Sustainability Make ene for Dairy Producers

Kira Hames,
Dairy Research & KTT Specialist,
Western Milk Pool
khames@albertamilk.com
780-577-3308

Sustainability is a loaded topic in the dairy industry, one that currently has more questions than answers. What does sustainability mean? Why does it matter? What are the expectations? Aren't dairy producers already good environmental stewards? Who pays for producers to do more?

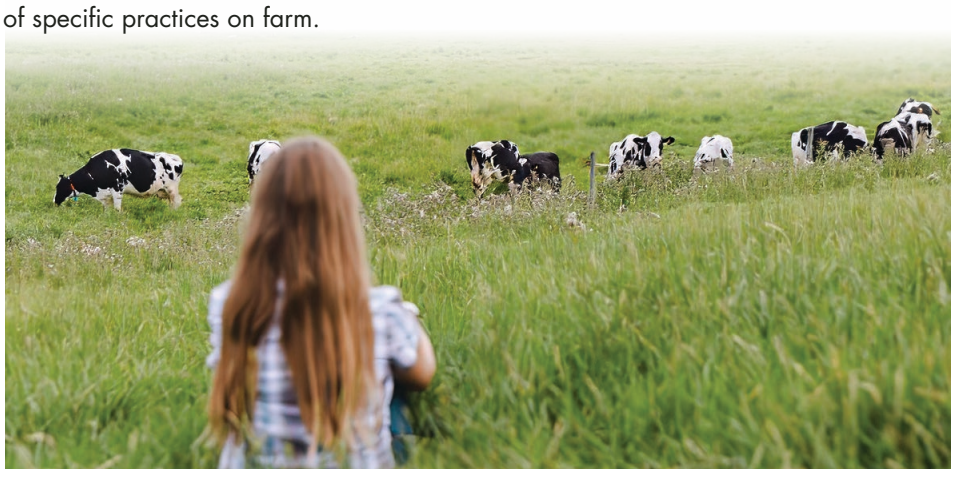
It's easy for organizations to set big goals, but when it comes down to how we deliver on those goals it becomes much more complicated. As the provincial producer organizations in the west are working on sustainability at the national level, it is important that sustainability makes sense for producers.

What does sustainability mean? Sustainability is meeting the needs of the present without compromising the ability of future generations to meet their own needs. In the context of the Canadian dairy industry, sustainability includes three equal and interconnected pillars.

- Economic Viability: Ensuring profitability and the long-term resilience of the dairy market.
- Environmental Stewardship & Emission Management: Actively managing greenhouse gas emissions while protecting natural resources like soil, water, and biodiversity.
- Social Responsibility: Upholding high standards for animal welfare, labour conditions, and contribution to local communities.

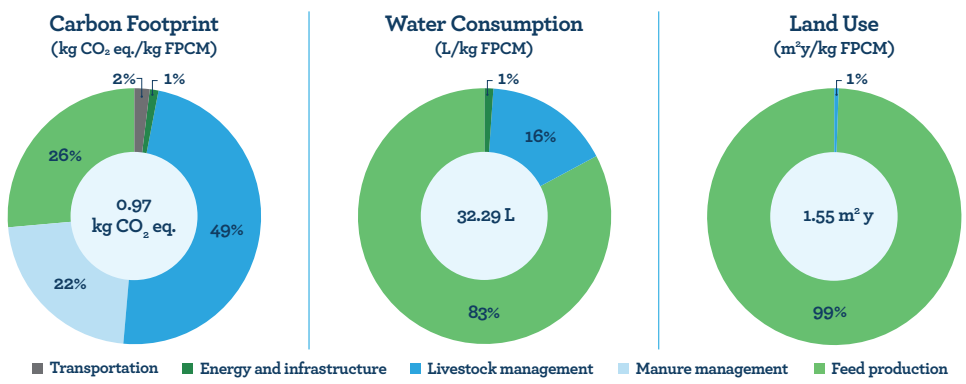
Why does sustainability matter? Beyond the obvious of wanting to produce high quality milk for generations to come, sustainability is one of the ways that the industry builds trust in the marketplace. Sustainability has become a core value for consumers and while that hasn't necessarily translated into consumers wanting to pay more for a more sustainable product, it is part of their consideration when buying dairy products over an alternative. In that way, sustainability on farm manages risk along the entire supply chain and maintains market access in countries with stricter regulations. According to the Canadian Centre for Food Integrity, concern for the environment peaked for Canadian consumers in 2021, but more recently it has been overtaken by concerns over affordability, access to healthcare and political climates around the world. However, we build trust by upholding consumer values, especially when no one is watching. This is an opportunity for the industry to continue building credibility as environmental stewards before concern for the environment returns as a consumer focus.

What are the expectations for sustainability? Pressure to measure and improve sustainable practices on dairy farms does not come from individual consumers, but from our supply chain partners such as dairy processors. The dairy processors in Canada are being asked to report on on-farm sustainability by their customers, like large retailers, grocery chains and so on. In other countries, processors can work directly with individual farms to require specific practices, but in the Canadian supply managed system they must work with the milk marketing boards. It benefits both producers and processors to work together to provide greater reporting to the other supply chain partners, to maintain market access internationally, and to continue attracting investment in the Canadian dairy industry. At the moment, sustainability reporting requirements are looking for an annual carbon footprint for the dairy industry, nationally and regionally, and adoption of specific practices on farm.



Canadian dairy producers are already excellent environmental stewards. Every five years, DFC conducts a life cycle analysis that estimates the carbon footprint for the Canadian dairy industry. In 2021, the industry produced 0.97 kg of CO2 equivalents per 1 kg of fat-and-protein-corrected milk. This is less than half the global average for dairy production, making the Canadian dairy among the most sustainable in the world. But that doesn't mean there are no improvements to be made. Approximately half of our footprint comes from livestock management, with the vast majority due to methane produced in the rumen of the cows. Sustainability is a dynamic field where technologies are changing and practices are improving. Canadian dairy producers can, and should, continue to be leaders in this space.

2021 Life Cycle Analysis (LCA) of Canadian Milk Production, DFC 2025



Who pays for producers to do more in sustainability? Our main measurement for environmental sustainability is our carbon footprint, or kg of carbon produced per kg of milk. So, producing more milk per cow improves production efficiency and environmental sustainability, while benefitting your bottom line. DFC's Sustainability BMP Guide describes a number of sustainable practices and indicates their expected return on investment and potential to reduce greenhouse gas emissions. This includes improving animal health, feed efficiency, genetic selection, as well as practices like cover cropping and minimized tillage. However, maximizing production efficiency will only get the industry so far in its sustainability goals. When the conversation turns to practices and technologies that benefit environmental sustainability but have little to no economic return for producers, there needs to be a plan to share these costs beyond the farm gate.

For corporations to make internationally recognized sustainability targets, they must commit to funding the reduction of emissions from their supply chain. For the dairy supply chain, most emissions come from the farm. There is an opportunity for the dairy producers to capitalize on investment from corporate supply chain partners, but only with a credible and efficient platform for sustainability. This would create a framework to incentivize the implementation of sustainable practices and sharing the cost along the supply chain.

An incentive model is being developed nationally, evaluating several practice- and performance-based examples for the Canadian context. A practice-based example is a specific feed additive while a performance-based example would be metrics like feed efficiency, herd longevity or carbon footprint. The incentive model will be:

- transparent and credible,
- have farm market value for producers,
- collaborative and pre-competitive for processors,
- user-friendly with minimized participation requirements, and
- include all farms in Canada on a voluntary basis.

The development of an incentive model is being guided by the National Sustainability Committee, which includes producer voting members and staff observers across Canada. This committee also guides DFC's work on piloting an on-farm carbon footprint calculator tool in each of the provinces, updating the Sustainability BMP Guide, and other activities that provide a producer-focussed approach to sustainability.

While there are still many answers needed on the dairy industry's sustainability journey, there are a few key takeaways to remember.

1. 'Sustainability' includes the economic viability of the dairy industry.
2. The Canadian dairy industry is already one of the most sustainable in the world.
3. Environmental sustainability is an investment opportunity; corporations need to finance reduced emissions at the farm level.
4. Production efficiency = sustainability.

Sustainability initiatives build trust in our consumers, grow confidence from our partners, and manage risk along the supply chain.