Making Our Own Playbook | An Industry-Led Response to the Challenge of Sustainability Reporting and Audit Proliferation

INDUSTRY WORKSHOP REPORT

FINDING SOLUTIONS TO SUSTAINABILITY REPORTING FOR GROWERS/PACKERS/SHIPPERS

A Workshop for Delivering Sustainability Assurance to Customers

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CPMA

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Executive Summary

Escalating demand for sustainability verification in fresh produce is creating systemic risks that threaten to undermine the very goals of transparency and improvement. A proliferation of audits, certifications, and questionnaires is creating a state of "audit fatigue" across the entire agricultural value chain. While this burden is felt acutely by growers and suppliers, it often originates from pressures placed on buyers and retailers by their own stakeholders for greater transparency. This systemic pressure distracts all participants from implementing genuine environmental improvements, consuming them instead with the complex demands of reporting. The result is a system where more auditing activity does not equate to better assurance and can, paradoxically, lead to disengagement, minimalist compliance, and a degradation of trust.

This report synthesizes insights from a pivotal industry workshop held April 8, 2025, in Montreal Canada, outlining this challenge and propose a strategic path forward. The core finding is that a passive, compliance-driven response to these pressures is untenable. The industry must move from a reactive posture to a proactive one to address the “Assurance Paradox” by establishing a unified, pre-competitive, and industry-led sustainability assurance framework, referred to herein as the Environmental Charter.

The proposed Charter is built on a foundation of key principles designed to resolve the Assurance Paradox. It advocates for a **metrics-first, not practices-first** approach, shifting the focus from burdensome practice verification to quantifiable, outcomes-based data that is both decision-useful for buyers and operationally valuable for producers. It prioritizes **operational-level reporting** over complex and costly product-level life cycle assessments, ensuring the framework is scalable and accessible. Crucially, it is envisioned as a **grassroots, pre-competitive initiative**, built and governed by the industry itself to ensure it remains practical and credible.

The report deconstructs this framework across five core sustainability pillars—Water, Energy, Packaging, Material Use, and Land Management—providing a deep-dive analysis of the metrics, challenges, and strategic opportunities within each. It draws critical lessons from the Potato Sustainability Alliance (PSA) model, which demonstrates that providing tangible value back to the grower through tools for benchmarking and continuous improvement is a key consideration to achieving widespread adoption.

The proposed Environmental Charter represents a pivotal strategic approach for the fresh produce industry, designed to navigate the increasingly complex and fragmented landscape of sustainability reporting. In response to the complex patchwork of reporting demands, the Charter proposes a streamlining of meaningful data points both tracked and measured by growers as core to providing greater transparency and delivering more value to all stakeholders along the supply chain. The Charter provides this by guiding companies on an evolutionary journey—from those having little or no sustainability monitoring, to incorporating foundational metrics, and ultimately to adopting a comprehensive framework. This progression is essential for establishing critical, industry-wide baselines, fostering a culture of genuine continuous improvement rather than outward-facing compliance.

A core strength of the outcome-based Charter is its potential role in mitigating the significant risks associated with having sustainability targets imposed from the outside. When external stakeholders dictate metrics without a full understanding of agricultural realities — such as the unique functional needs of produce

packaging or the context-specific nature of water use —the result is often impractical requirements that create audit fatigue and stifle progress. By developing a framework defined *by* the grower community, the Charter ensures that sustainability metrics are practical, relevant, and drive meaningful long-term outcomes. This empowers the industry to shift from a reactive posture to a proactive one, collectively shaping a sustainable future that is both credible to market stakeholders and consumers, while also being functionally viable on the farm.

Based on the workshop's key findings, the report puts forth a set of ideas for consideration to further promote dialogue within the industry in how best to mitigate the risks associated with sustainability reporting and audit proliferation. These include:

1. **Establish a Cross-Commodity Governance Council:** Form a formal, pre-competitive body to oversee the framework's development, ensuring it maintains a crucial balance between external credibility and on-farm feasibility.
2. **Adopt a Tiered, Metrics-Based Framework:** Implement a tiered system (e.g., Bronze, Silver, Gold) to foster inclusivity for all producers while creating a clear pathway for continuous improvement and leadership.
3. **Develop a Clear, Multi-Stakeholder Value Proposition:** Design the framework to deliver tangible benefits to all participants—reducing audit burdens and providing efficiency insights for producers, while delivering credible, aggregated data for buyers and retailers.
4. **Engage Proactively with Regulators and Standard-Setters:** Use the collective, data-backed voice of the framework to shape sound policy and avoid misaligned regulations that fail to account for the functional realities of the fresh produce supply chain.

By embracing this strategic vision, the fresh produce industry can transform the significant burden of sustainability reporting into a powerful source of operational innovation, supply chain resilience, and lasting competitive advantage. This workshop report provides the building blocks for that transformation.

WORKSHOP GOAL & FORMAT

FINDING SOLUTIONS TO SUSTAINABILITY REPORTING FOR GROWERS/PACKERS/SHIPPERS

A Workshop for Delivering Sustainability Assurance to Customers

Monitoring, reporting, and ultimately providing assurance to customers regarding sustainability is a complex and risk-laden endeavor for fresh produce suppliers. As buyers demand increasing assurances on sustainability outcomes – ranging from balanced land management and efficient use of water, energy, and materials, to mitigating packaging waste, and increasing regulatory compliance – growers must find effective and efficient solutions for sustainability monitoring and reporting.

"Finding Solutions to Sustainability Reporting for Growers/Packers/Shippers" is an industry-led, hands-on half-day workshop designed to equip those responsible for sustainability in their firms with the knowledge, connections, and insights necessary to develop and execute their sustainability reporting strategy.

Utilizing a classroom format supported by subject matter expert-facilitated breakouts, the sustainability workshop offers a unique opportunity for the industry to learn from one another, share key lessons learned, and develop pragmatic solutions and actionable takeaways participants can immediately apply to their business. Complemented by a participant workbook, workshop summary, and post-workshop collaboration support, this workshop is a must-attend event for sustainability professionals in the fresh produce sector.

ACKNOWLEDGEMENT

The Canadian Produce Marketing Association wishes to thank the following sponsors who made the 2025 Sustainability Workshop possible.

The Assurance Paradox: Navigating Audit Proliferation in Fresh Produce

The landscape of sustainability assurance in the fresh produce industry is increasingly defined by a fundamental and unsustainable tension. As stakeholders—from investors and regulators to retailers and consumers—rightfully demand greater transparency and accountability, the mechanisms designed to provide this assurance are becoming counterproductive. The proliferation of disparate standards, audits, and reporting requests has created a complex and costly environment that risks stifling, rather than stimulating, progress towards sustainable agricultural operations. This section defines this challenge, details its impact on the industry, analyzes its primary drivers, and frames it as the "Assurance Paradox"—a systemic issue where the uncoordinated pursuit of trust risks undermining the integrity of the system itself[1].

Defining the Challenge: From Assurance to "Audit Fatigue"

The demand for sustainability reporting is rooted in a "credibility gap" that has emerged between organizations and their stakeholders. Global supply chains are complex, many sustainability metrics are intangible, and self-reported corporate narratives are often met with skepticism. In response, third-party auditing and certification have become critical mechanisms for building trust and verifying claims. This need for assurance is further compounded by the introduction of greenwashing guidelines such as Bill C-59 in Canada, which puts significant pressure on companies to substantiate sustainability-related claims through audits, certifications and other means of assurance provision. However, this has led to a new and significant problem: audit proliferation, or "audit fatigue."

Academic literature conceptualizes audit fatigue as a state of indifference, apathy, or frustration arising from the duplication of effort and overexposure to numerous, repetitive audits. This phenomenon is particularly acute when assessing the sustainability of supply chains due to several compounding factors. First, the scope of sustainability is vast, covering a wide array of environmental, social, and economic issues that often cannot be captured in a single audit. Second, and most critically, there is an absence of consensus on sustainability standards, resulting in a multitude of different frameworks, variations, and interpretations. A single producer supplying multiple customers may be forced to comply with numerous, sometimes contradictory, sets of requirements, creating immense administrative pressure and diverting resources away from genuine improvement initiatives. This situation forces auditees to view the entire assurance process not as a tool for self-improvement, but as a "mundane and routine task that needs to be completed as quickly as possible".

The Voice of the Fresh Produce Industry: A State of "Reporting Consumption"

The theoretical concept of audit fatigue was vividly brought to life by the stakeholders participating in the workshop. The central problem was expressed as follows: most companies are "consumed with reporting, instead of focusing on the big picture of how to actually lower the environmental footprint of our supply

[1] At present, there appears to be three options being actively explored to mitigate sustainability reporting and audit proliferation risk. These can be described as follows (ref: IFPS Sustainability Committee presentation, June 2025, Netherlands):

1. **Benchmarking Option** (i.e., schemes reference against a global benchmark e.g., CGF Sustainable Supply Chain Initiative, UNIDO, others)
2. **Scheme-Centric Option** (i.e., a single or select few sustainability schemes become the industry standard)
3. **Commodity-Led Option** (i.e., sustainability reporting owned by the grower/commodity groups e.g., Potato Sustainability Alliance model)

chains". This state of "reporting consumption" is fueled by a fragmented and confusing reporting landscape.

Workshop participants identified a consistent set of leading challenges that directly reflect the symptoms of audit fatigue: risks of misreporting caused by different reporting requirements for different customers; the high cost of data collection, both in terms of labor and technology; a fundamental lack of consistency across standards; and uncertainty around the most basic question of all: "what do we measure?". A poll of workshop participants visually underscored these challenges, with terms like 'Inconsistencies,' 'Cost,' 'What to measure,' 'Standardization,' and 'Lack of reliable data' emerging as the most prominent barriers, painting a clear picture of the collective frustration and confusion. These points are outlined Figure 1.

Figure 1: What are your leading challenges & barriers to sustainability reporting?

It could subsequently be argued that this entire ecosystem of challenges under the single word "assurance" – the core issue being the proliferation of ways to provide this assurance, from questionnaires and certifications to various audit schemes, each with its own set of costs and burdens. This reality is exacerbated by the inherent complexities of fresh food supply chains, which are defined by high product perishability, seasonal production cycles, and diverse, fragmented networks of growers, packers, and distributors. The result is a system where producers feel overburdened by duplicative requests, leading to frustration and, often, poor or incomplete responses provided only to satisfy a contractual reporting obligation.

The Downward Pressure: Retail and Regulatory Drivers

The demand for supplier data and the resulting audit fatigue are not arbitrary; they are driven by significant top-down pressures from both retailers and regulators. Major food retailers are navigating their own set of intense pressures, including regulatory obligations and rising stakeholder demands from investors, employees, and customers, leading to setting ambitious corporate ESG commitments, such as achieving Net

Zero emissions.

A critical factor is the structure of corporate greenhouse gas (GHG) inventories. For retailers, Scope 3 emissions—those originating in the value chain, including from agricultural production—can represent a staggering 97% of their total footprint. Consequently, achieving their climate targets is impossible without granular data from their suppliers – accompanied by related carbon reduction commitments and initiatives. This necessity translates directly into downward pressure on the supply chain, formalized through requirements such as suppliers being required to set their own science-based targets.

This retail-driven demand is being amplified and codified by an expanding web of global regulations. The workshop participants referenced several key frameworks that are shaping the future of mandatory reporting, including the Canadian Sustainability Standards Board, the Taskforce on Climate-related Financial Disclosures (TCFD), the Task Force for Nature-Related Financial Disclosures (TNFD), and the Science Based Targets initiative (SBTi). These initiatives are part of a global movement toward standardized, mandatory disclosure. The European Union's Corporate Sustainability Reporting Directive (CSRD), for example, now compels companies to provide detailed, standardized data on their value chain impacts, including GHG emissions, agrochemical use, water consumption, and biodiversity impacts. In addition, Canada's Bill C-59 has intensified the regulatory burden on retailers by amending the Competition Act to combat greenwashing, requiring them to now possess "adequate and proper substantiation" for any environmental claims they make. This creates a significant new reporting and documentation requirement, as retailers must be prepared to defend their sustainability statements with robust testing and adherence to internationally recognized methodologies to avoid substantial penalties. As these regulations become entrenched, the demand for verified, auditable data from the farm level will only intensify, further fueling the cycle of audit proliferation.

The cumulative effect of these pressures creates a difficult operating environment. Producers are caught between the practical realities of farming and a cascade of data requests that are often disconnected from those realities. This disconnect is the source of the Assurance Paradox. The system's response to the credibility gap has been to demand more data and more audits. However, because this demand is uncoordinated and often fails to account for the feasibility of data collection at the farm level, it creates a new set of problems. The very mechanisms designed to build trust are instead fostering an environment of frustration, inefficiency, and disengagement. The proliferation of assurance activities, intended to enhance transparency, risks eroding the system's integrity and effectiveness. This happens when the burden of compliance becomes so great that it overshadows the goal of improvement. Farmers, overwhelmed by duplicative requests, may resort to minimalist "box-ticking" or, in the worst cases, provide incomplete information simply to satisfy the immediate demand, thereby undermining the very trust the system was designed to create.

The more assurance is sought through these fragmented means, the less reliable and meaningful that assurance becomes. The system, intended to solve for a lack of trust, begins to generate its own untrustworthiness.

An Industry-Led Solution: The Environmental Charter Framework

In response to the systemic challenges of audit proliferation and reporting fragmentation, the workshop

proposed a strategic path forward: a unified, industry-led Environmental Charter[2]. This solution is not another top-down mandate but rather an opportunity for the fresh produce industry to collectively "make our own playbook". By establishing a common framework for measuring and reporting sustainability, the industry can move from a reactive state of compliance to a proactive position of leadership, shaping its own destiny in the evolving landscape of corporate accountability. This section outlines the core principles of this proposed framework and draws critical lessons from the Potato Sustainability Alliance (PSA), a pioneering initiative that provides a potential blueprint for success.

Core Principles of a Unified Framework

The proposed Environmental Charter is designed to directly address the root causes of audit fatigue by fundamentally rethinking the approach to sustainability assurance. Its central objective is to bring uniformity, simplicity, and scalability to the assurance space, making it both cost-effective for producers and decision-useful for buyers. This vision is built upon a set of core principles that differentiate it from existing sustainability schemes.

Workshop materials clarified the specific nature of this proposed Charter, emphasizing what it is and, just as importantly, what it is not. The framework is explicitly *not* a new certification scheme with a consumer-facing logo, nor is it a rigid standard to be managed by industry associations. It is also not positioned as a "silver bullet" that will satisfy every reporting requirement. Instead, the Charter is envisioned as a set of outcome-based commitments that an agricultural operation can adopt, supported by a standardized reporting approach. It is intended to function as a verified participation

Proposed Environmental Charter

What this isn't

- A certification scheme with a logo attribute to be placed on products and/or packaging.
- A standard/scheme that the industry associations are being asked to manage.
- A silver-bullet that ensures 100% of a company's sustainability assurance requirements will be met.

What this is

- A charter of **outcome-based commitments**, agnostic of crop, that an ag production operation can validate with a standardized approach to reporting on those commitments.
- A **verified participation program** with the ability to double as an educational initiative and assure buyers/regulators we are making an impact.

Proposed Environmental Charter Commitments

Water Use-Efficiency
Water use efficiency is continuously improved in their organization as well as their supply chain, that prioritizes efforts based on withdrawal intensity and sourcing risk.

Energy Use-Efficiency
Energy use efficiency is continuously improved in their organization as well as their supply chain, that prioritizes efforts based on consumption intensity and emissions contributions.

Packaging
Packaging decisions reduce life-cycle impact while balancing food safety and product shelf-life and other packaging-related sustainability outcomes (e.g., food affordability, food availability, etc.).

Material Use-Efficiency
Responsible procurement, use and management of materials from pre-purchase to the end-of-life management of the materials.

Land Management
Land management practices maintain or enhance soil health and biodiversity. Operations also commit to protecting ecologically sensitive areas and threatened/endangered species that are within or close to an operation's boundaries or that an operation may otherwise impact.

[2] The proposed Environmental Charter was informed by the Draft Sustainability Charter resulting from the April 2024 IFPS/GCFP/CPMA Sustainability Summit, reprinted in Annex A.

program that can also serve as an educational initiative to assure stakeholders that the industry is making a tangible impact.

Initial feedback from workshop participants suggests the proposed Charter is a promising step in the right direction. In a poll asking how well the proposed commitments address their sustainability considerations, the Charter received a favorable average score of 5.2 out of 7. Over half of the respondents (58%) rated it a 6 or 7, indicating strong alignment, while a third rated it a 5.

Figure 2: Workshop participants agreed that the proposed Environmental Charter commitments were "Good to Excellent" to address sustainability considerations (91% of those surveyed). (Score: 5.2/7)

Rating	Percentage of Respondents
7 (Excellent)	23%
6 (Very Good)	35%
5 (Good)	33%
4 (Fair)	8%
3 (Poor)	3%
2 (Very Poor)	0%
1 (Extremely Poor)	0%

When asked what edits or gaps needed to be addressed, participants highlighted the need for 'Specific metrics,' 'Clear Benchmarks,' and ensuring the framework is 'Achievable for all sizes of companies.' Other key themes included 'Food waste reduction,' 'Regulatory buy in,' and 'Farm profitability,' indicating a desire for a framework that is both practical and comprehensive.

Figure 3: What edits or gaps might need to be addressed in the proposed Environmental Charter?

First and foremost is the principle of being **metrics-first, not practices-first**. Many current sustainability

standards are increasingly critiqued for their focus on verifying practices (e.g., "Do you use cover crops?"). This approach creates a significant burden of proof for growers and often fails to capture the scale or impact of an action. The Charter proposes to invert this model by focusing on a core set of outcomes-based metrics, akin to a financial audit that assesses profitability through data rather than by inspecting every business practice. This aligns with a broader global shift towards quantitative, data-driven sustainability frameworks that provide a common language for performance. Once a common set of metrics is established, the industry can have far more productive and context-specific conversations about the practices that best achieve those outcomes.

The second core principle is a focus on **operational-level reporting**. While buyers often request product-level data, this frequently requires complex and costly Life Cycle Assessments (LCAs) that are impractical for most producers to conduct at scale. The Charter advocates for collecting data at the operational or farm level, which is more feasible for producers to implement and, crucially, provides them with data they can use for their own management decisions. This creates a dual benefit: the data satisfies external reporting needs while also serving as an internal tool for improving efficiency and profitability, thereby increasing the value proposition for the producer.

The third principle is that the Charter must be a **grassroots, pre-competitive initiative**. It is explicitly not intended to be another certification scheme with a new logo or a rigid standard managed by a single entity. Instead, it is envisioned as a framework that the industry, led by its associations, collaboratively builds, validates, and endorses. The goal is to create a unified solution that the entire industry can stand behind and present to buyers and regulators as a credible, harmonized approach to assurance. Its pre-competitive nature ensures that the focus remains on collective improvement and risk mitigation for the entire sector, rather than creating a market advantage for any single member. This collaborative model is echoed by successful global bodies like the Sustainable Agriculture Initiative (SAI) Platform, which brings together hundreds of companies to work on shared sustainability challenges.

A Pioneer's Blueprint: The Potato Sustainability Alliance (PSA) Model

The feasibility and potential of such an industry-led framework are not merely theoretical. The workshop featured a detailed case study from the Potato Sustainability Alliance (PSA), an organization that has successfully navigated these exact challenges for a single, major commodity. The PSA's journey offers a powerful blueprint for the broader fresh produce industry, highlighting both the pitfalls to avoid and the critical success factors to emulate. Today, the PSA's program covers over 50% of all potato acreage in North America, giving the organization significant credibility and a powerful, unified voice when engaging with major global buyers.

The most critical lesson from the PSA experience is the imperative to **provide tangible value back to the grower**. The PSA's initial attempt at a proprietary survey failed because it was perceived by farmers as a burdensome, top-down requirement with no benefit to them. The program was transformed when the PSA partnered with Syngenta to use the Cropwise Sustainability mobile app. This tool provided growers with immediate, confidential feedback on their performance and anonymously benchmarked their results against their peers. This shifted the dynamic from a painful compliance exercise to a valuable tool for continuous improvement. This approach is strongly supported by academic research, which finds that the most effective sustainable sourcing programs are those that move beyond simple auditing to foster genuine partnerships

with farmers, using highly trained auditors to provide farm-specific recommendations and support[3]. By giving growers something they can use to improve their own operations, the PSA created a powerful incentive for voluntary participation and engagement.

A second key lesson is that **the enemy of good is perfect**. PSA shared the lessons learned that extensive cycles of discussion between stakeholders led to endlessly debating the "perfect" set of metrics and methodologies. The organization's most significant progress came when it made the decision to move forward with an imperfect but actionable plan, committing to learn and correct course along the way. This demonstrates that taking action, even on a preliminary basis, generates far more valuable and consequential feedback from the community than perpetual debate.

Finally, the PSA's experience underscores the need for **decisive governance to maintain momentum**. It was noted that one of the biggest impediments to the PSA's early development was the tendency to revisit decisions every time a new perspective was introduced – leading to a cycle of revisiting settled issues which slowed progress. It was noted that a key lesson learned was that once a collective decision is made, it must be treated as final to allow the organization and the collective effort to move forward. This highlights the necessity of a strong, consistent, and decisive governance structure to prevent stagnation and ensure the initiative maintains its forward trajectory.

The long-term success of a broad, industry-led framework like the proposed Environmental Charter ultimately depends on striking a delicate "Viability Balance." On one side, the framework must be scientifically robust, comprehensive, and verifiable enough to be deemed credible by external stakeholders, including sophisticated buyers, regulators, and NGOs. This creates a pressure for complexity and rigor. On the other side, the framework must be simple, pragmatic, low-cost, and valuable enough to be voluntarily adopted by a vast and diverse community of producers, many of whom are small, resource-constrained, and already suffering from audit fatigue. This creates a pressure for simplicity and accessibility.

The PSA's journey perfectly illustrates this balance, with earlier attempts struggling because it was too much of a burden with too little value. The successful model found the sweet spot: it was simple enough for farmers to use efficiently (taking only 20-30 minutes annually after the first year) and provided direct, tangible value through benchmarking and educational opportunities, which was the key to achieving over 50% market penetration.

The proposed Environmental Charter for the entire fresh produce industry must therefore be strategically designed not as a comprehensive encyclopedia of every possible sustainability metric, but as a curated set of high-impact outcome-based metrics that are both meaningful for external reporting and directly beneficial for internal farm management.

In order to determine the feasibility of the proposed Charter's core sustainability pillars, each was reviewed and discussed with the workshop participants, seeking feedback on its applicability for the fresh produce industry at large.

[3] Sustainable sourcing in agricultural supply chains : an analysis across scales | Stanford Digital Repository. https://purl.stanford.edu/dg515sn8080

Deconstructing the Charter: Analysis of Core Sustainability Pillars

The proposed Environmental Charter is structured around five core pillars of environmental performance: Water, Energy, Packaging, Material Use, and Land Management. To be effective, the metrics within each pillar must be carefully selected to balance scientific credibility with practical feasibility. This section provides a deep-dive analysis of each pillar, synthesizing the workshop discussions, identifying the key strategic considerations for developing a robust and workable set of metrics.

1. Water Use Efficiency

Water management is a foundational issue for agriculture, touching on quantity, quality, and efficiency. The workshop discussion revealed it to be a highly complex and context-dependent topic, making the development of universal metrics particularly challenging.

The group intensely debated the utility of common metrics like "water intensity" or "crop per drop" (e.g., tons of produce per cubic meter of water). Expert feedback was that such metrics were often "pretty irrelevant" in practice. Their value as an indicator of continuous improvement is limited because they can be easily skewed by external factors like a single heavy rainfall event. Despite their limited utility, these metrics are still frequently requested by buyers. This points to a critical need to educate the value chain on more meaningful indicators.

Water Use Efficiency | Metrics for Consideration

- Water intensity – total water withdrawal in megaliters / production normalizer
- Wastewater intensity – total wastewater discharge in megaliters / production normalizer
- Total water consumption – (total water withdrawal – total wastewater discharge)
- Water sourcing risk (physical risks quantity, physical risk quality)
- Annual count of water quality non-compliance incidents

A significant challenge raised by participants was the practical difficulty of data collection, especially for smaller growers who may not have meters on all their wells or who use irrigation methods, like seepage, that are difficult to quantify. Furthermore, the urgency and relevance of water metrics vary dramatically by region; a grower in an area with abundant water faces a very different set of challenges than one in a severely water-stressed region. This led to a key conceptual shift proposed during the workshop: moving beyond simple on-farm "water management" to a broader vision of "water stewardship," which considers the farm's role and impact within its entire watershed.

This shift from a universal key performance indicator (KPI) to a more nuanced approach is strongly supported by leading global frameworks. The workshop's emphasis on assessing "water sourcing risk" aligns directly with the purpose of globally recognized tools like the World Resources Institute (WRI) Aqueduct and the WWF Water Risk Filter, which were mentioned by name. More comprehensive frameworks, such as the Global Farm Metric, also move beyond simple efficiency to include metrics for water source, usage patterns, and the impact of pollutants. Similarly, the World Business Council for Sustainable Development (WBCSD) framework for regenerative agriculture advocates for measuring blue water withdrawal in the context of local water stress levels, reinforcing the need for a risk-based approach.

The pursuit of a single, universal KPI for water use was argued by many as a flawed objective. Water is a hyper-local issue, and a simple efficiency metric fails to capture the critical context of its source (e.g., rainfed vs. irrigated from a stressed aquifer), its quality, or the health of the surrounding ecosystem. A more

scientifically sound and practically achievable strategy is to focus on a process of **contextual risk management**. This process would involve, first, assessing the baseline water risk of an operation using globally accepted, publicly available tools. Second, it would involve measuring what is feasible and relevant within that specific context (e.g., metered withdrawal from a pump, or qualitative documentation of practices that improve infiltration). Other metrics considered by the industry include tracking wastewater intensity and the annual count of water quality non-compliance incidents, further building out a risk-based profile of an operation. Finally, it would focus on demonstrating continuous improvement of practices that address the most material risks for that particular watershed, whether that be improving irrigation efficiency in a drought-prone area or managing nutrient runoff to protect water quality in a high-rainfall region. The Charter should therefore guide producers through this risk-based process rather than mandating a single, potentially misleading, efficiency metric. This approach is more robust, more flexible, and ultimately more meaningful.

Workshop polling reflected this complexity. While the proposed water metrics received a moderately positive score of 4.9 out of 7, with 76% of participants rating them a 6 or 7, the qualitative feedback was nuanced. A word cloud of challenges and gaps highlighted the need to account for 'Crop variances,' the difficulty of 'How to measure' runoff and seepage, and questions around 'Grower readiness' and the affordability of technology.

Figure 4: Do the proposed metrics accurately capture the key water use considerations? (Score: 4.9/7)

Rating	Percentage of Respondents
7 (Excellent)	29%
6 (Very Good)	47%
5 (Good)	18%
4 (Fair)	3%
3 (Poor)	3%
2 (Very Poor)	0%
1 (Extremely Poor)	0%

2. Energy Use Efficiency

In contrast to the complexities of water, the pillar of energy and emissions management was identified as a more straightforward and immediately actionable area. The workshop discussion highlighted a clear and direct link between tracking energy consumption—data readily available from utility and fuel bills—and calculating a significant portion of a company's Scope 1 and 2 greenhouse gas (GHG) emissions.

The primary driver for engagement in this pillar is financial. As multiple participants noted, reducing energy use directly translates into cost savings, creating a powerful and easily understood business case for efficiency improvements. This strong financial incentive makes energy management a highly effective entry point for a broader sustainability program. The conversation also touched on more sophisticated aspects, such as accounting for the carbon intensity of the electricity grid (e.g., a kilowatt-hour from a hydro-powered grid has a different emissions factor than one from a coal-powered grid) and the potential for strategic

Energy Use Efficiency | Metrics for Consideration

- Energy intensity (Total energy consumption in joules / production normalizer)
- Other acceptable intensities based on energy source (Total kwh, gal, lbs / production normalizer)
- Emissions intensity (Total generated emissions in MT CO2e / production normalizer)

energy use, such as shifting consumption to off-peak hours to take advantage of lower costs or on-site solar generation.

The metrics proposed in the workshop—total energy consumption, energy intensity per unit of production, and energy use by source—are foundational to virtually every major global reporting framework. The GHG Protocol, which is the basis for most corporate inventories, requires this level of data. Similar metrics for energy use and GHG emissions are central components of the Field to Market standard, the Global Farm Metric, and the WBCSD's regenerative agriculture framework, demonstrating strong international alignment on the importance and structure of these indicators.

The clear, direct, and short-term return on investment associated with energy efficiency makes it the ideal **gateway pillar** for the entire Environmental Charter. While the long-term benefits of improving soil health or the systemic value of reducing packaging waste can be abstract, the savings from a lower electricity bill are tangible and immediate. By starting with energy management, the Charter can demonstrate its value to producers in clear financial terms. This initial success can build trust, secure buy-in, and create momentum for engagement in the more complex and costly pillars of the framework. Positioning energy as the practical first step that proves the business case for the entire sustainability journey is a critical strategic choice for ensuring the Charter's widespread adoption and long-term success.

This straightforwardness was reflected in workshop polling, where the proposed energy metrics received a score of 4.8 out of 7. Key feedback from participants centered on the need to 'Capture the source of energy,' track '% renewable,' and develop 'Metrics tied to expenses/money saver' to create a clear business case. The potential for 'AI tools**'** to optimize energy use was also a recurring theme.

Figure 5: Do the proposed metrics accurately capture the key energy use considerations? (Score: 4.8/7)

Rating	Percentage of Respondents
7 (Excellent)	0%
6 (Very Good)	36%
5 (Good)	47%
4 (Fair)	17%
3 (Poor)	0%
2 (Very Poor)	0%
1 (Extremely Poor)	0%

3. Packaging

The discussion on packaging was one of the most passionate and critical of the workshop, revealing a deep disconnect between regulatory trends and the operational realities of the fresh produce industry. The central

argument, forcefully articulated by many packaging experts in attendance was that the industry must shift the conversation from a narrow focus on **composition** (what a package is made of) to a holistic understanding of **functionality** (what the package does). The unique challenge of the industry is that it is packaging a "living, breathing organism," and the primary function of that package is to maintain quality, ensure safety, and extend shelf life, thereby preventing food waste.

Packaging | Metrics for Consideration

- Material assessment – Volume (lbs/kg) of all packaging used by material specification (corrugate, paper, fiber board, PET, HDPE, LDPE, PP, PLA, PHA, vinyl, rubber, etc.) and scope category (primary, secondary, tertiary)
- Food Safety evaluation (Functions/Environment grid evaluation matrix)
- Shelf-life impact evaluation (Days of quality shelf life)

This functional imperative is currently at odds with the direction of many regulations. Emerging Extended Producer Responsibility (EPR) laws in Canada and legislation like SB 54 in California are primarily focused on material composition, mandating plastic reduction, minimum recycled content, and specific end-of-life outcomes like recyclability or compostability. This creates a "compliance trap" for the fresh produce industry. A package that meets these narrow compositional requirements—for example, a compostable film—might fail in its primary function of protecting the product. This can lead to reduced shelf life, increased spoilage, and ultimately, a significant increase in food waste.

This outcome is not just an operational issue; it is a major sustainability failure. The environmental impact of food waste—in terms of the land, water, energy, and fertilizer inputs used to grow it, and the potent methane emissions it generates in a landfill—is orders of magnitude greater than the impact of the packaging itself. Therefore, a regulatory framework that optimizes for packaging material at the expense of product protection can result in a substantial net negative environmental outcome.

The industry must therefore proactively reframe the debate from "sustainable packaging" to "sustainable packaging *systems*." This requires a new set of metrics that go beyond simple material composition. The Charter's packaging pillar must be revolutionary, not merely compliant. It must elevate **food loss and waste mitigation** to a primary performance indicator, measured alongside material metrics like recycled content and end-of-life circularity. Concrete proposals for achieving this include developing a "Functions/Environment grid evaluation matrix" to systematically assess packaging choices and introducing a specific metric for "Days of quality shelf life" to directly quantify a package's effectiveness in preventing waste. This will allow the industry to use data to demonstrate to regulators, buyers, and consumers that the most sustainable package is the one that most effectively delivers a safe, high-quality product to the end user, thereby preventing the much larger environmental catastrophe of food waste. This functionality-first approach is essential for developing packaging solutions that are truly sustainable in a holistic sense.

This deep disconnect was evident in workshop polling, where the proposed packaging metrics received the lowest score of all pillars at 3.8 out of 7, indicating significant concerns. The primary gaps identified by participants were the need to prioritize 'Functionality,' address the high 'Cost' of alternatives and LCAs, and achieve 'Regulatory understanding' and consistency. The call for a 'Unified front' to engage with regulators was a strong theme.

Figure 6: Do the proposed metrics accurately capture the key packaging considerations? (Score: 3.8/7)

Rating	Percentage of Respondents
7 (Excellent)	0%
6 (Very Good)	11%
5 (Good)	37%
4 (Fair)	26%
3 (Poor)	20%
2 (Very Poor)	6%
1 (Extremely Poor)	0%

4. Material Use Management

The pillar of material use was presented in the workshop as a "catch-all" category designed to address the efficiency of all non-energy and non-water inputs and outputs within an operation. The core metrics proposed were **landfill intensity** (the total amount of waste sent to landfill or incineration) and **diversion rate** (the percentage of waste diverted to more beneficial uses). A key conceptual shift introduced was the idea of thinking of "waste as a verb"—an action that signifies an operational inefficiency—rather than a noun.

Material Use Management | Metrics for Consideration

- Landfill intensity - lbs. sent to landfill/incineration / production normalizer
- Diversion rate % - lbs. of waste diverted from landfill/incineration / total lbs. of waste generated
- Hazardous waste (as defined by local/regional regulation) disposal volumes – metric tonnes (MT)
- Annual count of pollution/hazardous waste violation incidents

A significant portion of the discussion centered on the proper accounting of food loss and waste. Participants strongly advocated for incorporating established waste hierarchies, such as the one developed by the U.S. Environmental Protection Agency (EPA), into the measurement framework. This is critical because not all diversion methods are created equal. A simple, single diversion rate fails to distinguish between a low-value outcome like composting and a high-value outcome like donating surplus food for human consumption. To address this, participants advocated for adopting established frameworks like the RefED or EPA food waste hierarchies to create a more nuanced and meaningful picture of performance. Beyond food waste, other proposed metrics to create a comprehensive view of material use include tracking hazardous waste disposal volumes and the annual count of pollution or hazardous waste violation incidents.

This hierarchical logic, while most associated with food waste, provides a powerful and intuitive conceptual model that can be extended to *all* material streams. The concept of a waste hierarchy is a cornerstone of the circular economy, a model that is gaining significant traction in global policy and corporate strategy. Just as food waste has a hierarchy (Prevention > Donation > Animal Feed > Composting > Landfill), so too can other material streams. For secondary packaging like cardboard, the hierarchy might be: Prevention (eliminate unnecessary packaging) > Reuse (use a more durable container) > Recycle (into new cardboard) > Downcycle (into lower-grade paper products) > Waste-to-Energy > Landfill.

Therefore, the Charter could adopt a **universal hierarchical approach** for all material and waste streams. This would provide a single, consistent logic for managing a wide range of materials. It would allow for the development of a more sophisticated metric than a simple diversion rate—for instance, a "Waste Management Score" could be calculated based on the weighted average of where a company's various waste streams fall on their respective hierarchies. This approach moves beyond a binary "diverted vs. not diverted" measurement to a system that actively incentivizes continuous improvement by encouraging the movement of all materials to their highest and best use. This directly aligns operational efficiency with recognized sustainability best practices and provides a far more accurate representation of a company's commitment to circularity.

Polling of workshop participants showed general agreement with this approach, giving the proposed metrics a score of 4.7 out of 7. The most prominent feedback was the call to implement a formal 'Waste hierarchy' or 'Food hierarchy,' with specific mentions of programs like 'Second Harvest' (Canada) and 'Feeding America' (USA). Participants also emphasized the need for 'Consumer education' and ensuring farmers are 'recognized/incentivized for food donation'.

Figure 7: Do the proposed metrics accurately capture the key material use considerations? (Score: 4.7/7)

Rating	Percentage of Respondents
7 (Excellent)	13%
6 (Very Good)	26%
5 (Good)	42%
4 (Fair)	13%
3 (Poor)	6%
2 (Very Poor)	0%
1 (Extremely Poor)	0%

5. Land Management

The final pillar, land and soil health management, was identified by workshop participants as the most scientifically complex, costly, and context-dependent area to measure. The discussion revealed a significant tension between two approaches: measuring specific, quantitative **outcomes** (e.g., the percentage of soil organic matter, the rate of soil respiration, or microbial diversity through meta-genomic analysis) versus tracking the implementation of known beneficial **practices** (e.g., the use of cover crops, reduced tillage, or diverse crop rotations).

Land Management | Metrics for Consideration

- Soil health (chemical and physical) evaluation (Organic matter, carbon, aggregate stability, soil respiration, macronutrients)
  - Soil organic matter – SOM %LOI
  - Soil organic carbon – SOC LECO Instrument combustion test
  - Aggregate stability – SLAKES image recognition app
  - Soil respiration – Solvita test
  - Macronutrients – N, P, K, Ph, salinity (EC), cation exchange capacity (C.E.C.)
- Biodiversity below ground (soil microbial diversity) above ground (flora and fauna diversity) evaluation
  - Soil microbial diversity – Metagenomic analysis
  - Soil microbial diversity – Quantification of bacterial and fungal feeding nematodes
  - Flora & fauna diversity – Simpson's Index, Shannon-Weaver Index

Participants raised valid concerns about the high cost and technical expertise required for advanced soil testing, with some analyses costing hundreds of dollars per sample. Specific examples of these advanced (and costly) metrics discussed include quantitative soil tests such as SOM % by Loss on Ignition (LOI), SOC via the LECO instrument combustion test, aggregate stability measured with tools like the SLAKES app, and soil respiration via the Solvita test. Even more advanced metrics under consideration include metagenomic analysis for soil microbial diversity and the quantification of bacterial and fungal feeding nematodes. They also correctly pointed out the extreme variability of these metrics; soil health is influenced by innumerable factors including soil type, climate, cropping system, and even the time of year a sample is taken, making it difficult to establish consistent, comparable benchmarks. The term "regenerative agriculture" itself was challenged, with a call to clearly define what is being regenerated and how that improvement is proven with data.

This debate is not unique to the workshop; it is at the very heart of the global conversation on sustainable agriculture. Leading international bodies like the WBCSD, the Global Farm Metric, and Field to Market are all grappling with this "practice vs. outcome" dilemma[4]. The emerging consensus from these multi-stakeholder initiatives is that a rigid, one-size-fits-all approach is unworkable. A single, universal set of mandatory soil health metrics is scientifically unsound, and prescribing specific practices is equally flawed, as a practice that is beneficial in one context may be ineffective or even detrimental in another. The consensus is therefore shifting towards a focus on a common set of desired **outcomes**.

The most effective path forward for the Charter is to adopt an **outcomes-based, flexible menu approach**. This model would first define a set of 5-7 core land management outcomes that are universally recognized as important (e.g., 1. Improve or Maintain Soil Organic Carbon; 2. Enhance Water Infiltration and Retention; 3. Reduce Soil Erosion; 4. Improve Nutrient Use Efficiency; 5. Enhance On-Farm Biodiversity). Then, for each of these outcomes, the Charter would provide a "menu" of credible, scientifically backed metrics and qualifying practices that a producer could use to demonstrate progress. A grower in a specific region, working with a specific crop, could then select the combination of metrics and practices from the menu that are most relevant and feasible for their operation.

This approach elegantly resolves the practice vs. outcome debate. It provides the high-level structure and consistency that buyers need by establishing a common set of goals. Simultaneously, it offers the critical flexibility that producers require to operate effectively and make meaningful improvements within their

[4] Global Farm Metric | Holistic Sustainability Framework for Farming. https://www.globalfarmmetric.org/

unique agronomic and economic contexts. It moves the industry beyond a rigid, prescriptive model to a sophisticated, adaptive management framework that fosters genuine, context-appropriate progress in soil health and land stewardship.

The difficulty of this pillar was reflected in workshop polling, which gave the proposed land management metrics a score of 3.9 out of 7, tied for the lowest rating. The primary concerns raised by participants were the 'Cost of testing,' the need for clear 'monitoring methods,' and the inclusion of metrics for 'Pesticides.' The term 'Soil testing' appeared frequently, underscoring the practical and financial barriers to collecting outcome-based data in this area.

Figure 8: Do the proposed metrics accurately capture the key land management considerations? (Score: 3.9/7)

Rating	Percentage of Respondents
7 (Excellent)	12%
6 (Very Good)	24%
5 (Good)	24%
4 (Fair)	41%
3 (Poor)	0%
2 (Very Poor)	0%
1 (Extremely Poor)	0%

Strategic Considerations for a Harmonized Future

The proposed Environmental Charter represents a pivotal strategic approach for the fresh produce industry, designed to guide companies on an evolutionary journey from having little or no sustainability monitoring to adopting a comprehensive, metrics-based framework. This progression is essential for establishing critical, industry-wide baselines that foster a culture of genuine continuous improvement rather than burdensome, reactive compliance. By creating a unified playbook, the industry can move beyond inconsistent and confusing reporting demands toward a harmonized approach that is both scalable and cost-effective.

A core strength of the Charter is its role in mitigating the significant risks of having sustainability targets and milestones imposed by external regulators or customers who may lack a full understanding of agricultural realities. When such top-down mandates are misaligned with on-farm practicalities, they can inadvertently jeopardize the long-term sustainability of the very operations they seek to improve. For example, a narrow regulatory focus on packaging composition (e.g., mandating plastic reduction) without considering packaging functionality can lead to solutions that fail to protect the product, resulting in increased food spoilage and waste. Similar circumstances can be imagined in the case of inappropriate targets being applied to water use management, material use or land management, for example. This outcome not only creates a greater net negative environmental impact but also directly threatens the economic viability of producers and the stability of the fresh produce supply chain.

This proliferation of uncoordinated, and sometimes contradictory, external demands creates a state of "audit

fatigue," where producers are consumed by the cost and complexity of duplicative reporting. This diverts critical resources away from investing in genuine innovation and instead traps them in a cycle of minimalist compliance. By developing a framework defined *by* the grower community, the Charter ensures that sustainability metrics are practical, relevant, and drive meaningful outcomes. This empowers the industry to shift from a reactive posture to a proactive one, collectively shaping a sustainable future that is both credible to the outside world and functionally viable on the farm.

In summary, the analysis of the workshop discussions culminates in a clear imperative: the fresh produce industry must transition from a fragmented, reactive approach to sustainability reporting to a unified, proactive strategy. To achieve this, a set of concrete, actionable steps are required. The following series of ideas for considerations are provided to further promote dialogue within the fresh produce industry in how best to mitigate the risks associated with sustainability reporting and audit proliferation, thereby seeking to resolve the Assurance Paradox and create lasting value for the entire sector.

The strategic path forward must also incorporate the direct feedback from workshop participants on implementation. When asked about key actions and opportunities, several themes emerged: the critical need for **'grower tools and programs'** to make data collection feasible, the importance of **'cost sharing across the supply chain'** to ensure financial viability for producers, and the challenge of communicating the framework's value **'outside this room of engaged people'** to achieve broad industry buy-in.

1. Establish a Cross-Commodity Governance Council

The foundation of a successful industry-led initiative is a dedicated and effective governance structure. It is recommended that the industry consider establishing a formal, pre-competitive **Cross-Commodity Governance Council** to oversee the development, implementation, and evolution of the harmonized framework. This council's primary mandate would be to maintain the critical "Viability Balance"—ensuring the framework is simultaneously credible to external stakeholders and feasible for producers.

The council's structure should be modeled on the collaborative, multi-stakeholder principles of successful organizations like the Sustainable Agriculture Initiative (SAI) Platform, which brings together over 190 global companies to work on shared challenges. Its membership must be diverse and representative, including not only large and small growers and packers, but also influential retailers, food service companies, and independent technical experts (e.g., agronomists, soil scientists, packaging engineers). This broad representation is essential for ensuring that the resulting framework is both robust and practical.

Crucially, the council should learn from the governance lessons of the Potato Sustainability Alliance (PSA). It needs a clear charter that empowers it to be decisive and maintain forward momentum, avoiding the trap of endlessly re-hashing settled issues, which was identified as a major impediment to the PSA's early progress. Consistent leadership and a commitment to action over perpetual discussion will be paramount to the council's success.

2. Adopt a Tiered, Metrics-Based Framework

A one-size-fits-all framework risks excluding smaller or less technologically advanced producers, thereby limiting its scale and impact. To ensure broad adoption and encourage a journey of continuous improvement, it is recommended that the Charter be structured as a **tiered, metrics-based framework**. This

approach would allow companies to participate at a level that matches their current capabilities while providing a clear and aspirational pathway for advancement. A potential three-tiered structure could be:

- **Foundational Compliance:** This entry-level tier would focus on a core set of foundational, high-impact metrics that are accessible to all producers. The data required would be readily available from existing business records, such as utility bills for total energy and water consumption, waste hauling invoices for total waste to landfill, and basic tracking of key on-farm practices. The goal of this tier is to establish a baseline, get all producers engaged in the system, and begin the process of data collection in a standardized way.
- **Verified Performance:** This intermediate tier would require more advanced data collection and analysis. Metrics could include calculating energy and water *intensity* (per unit of production), conducting basic soil testing for key indicators like organic matter, tracking waste diversion rates by stream (e.g., recycling, compost), and utilizing public risk-assessment tools for water sourcing. This tier would demonstrate a more sophisticated level of performance management.
- **Leadership & Innovation:** This highest tier would be for industry leaders demonstrating cutting-edge sustainability performance. Metrics at this level could include conducting full GHG inventories that include value chain (Scope 3) emissions, undertaking detailed soil health analysis (e.g., aggregate stability, microbial activity), using Life Cycle Assessment (LCA) principles to inform packaging and input decisions, and measuring on-farm biodiversity using established indices.

This tiered structure makes the framework inclusive, providing a manageable entry point for all, while creating a powerful incentive for continuous improvement and recognizing industry leadership.

In addition, establishment of a metrics-based framework must aim to leverage and seek coherence with established or evolving metrics indices, such as the Stewardship Index for Speciality Crops (SISC)[5], or National Index on Agri-Food Performance[6], amongst others. The risk arising from the growing inventory of competing sustainability indices should be mitigated through a comprehensive review of existing frameworks and what components can be applied across the different varieties of fresh produce commodities.

3. Develop a Clear, Multi-Stakeholder Value Proposition

For the framework to achieve voluntary, widespread adoption, it must deliver clear and tangible value to all key participants. The Governance Council's work must be guided by the development of a compelling, multi-stakeholder value proposition.

- **For Producers (Growers, Packers, Shippers):** The primary value is the reduction of the audit burden. A single, streamlined report through the Charter should be designed to replace the multitude of duplicative questionnaires they currently face. Beyond burden reduction, the framework must provide actionable insights that lead to operational efficiencies, cost savings, and improved risk management. The success of the PSA's benchmarking tools proves that when producers are given data they can use to improve their own business, their engagement shifts from reluctant compliance to active participation.

[5] Supply Chain Sustainability | Stewardship Index for Specialty Crops. The primary SISC metrics are categorized into several key areas: water use, energy and greenhouse gas emissions, nutrient management, soil health, biodiversity, and food loss.
[6] National Index. The Index presents the criteria for measuring agri-food sector sustainability on a consolidated basis. It includes a suite of 20 metrics and 130 indicators. The intent is to paint a comprehensive view of sustainability – showing areas of leadership and shortcomings.

- **For Buyers (Retailers, Food Service):** The framework must provide a reliable and efficient source of credible, consistent, and decision-useful sustainability data. This data needs to be aggregable, allowing retailers to report on their own Scope 3 emissions and other corporate ESG targets with confidence. By relying on a standardized industry framework, buyers can significantly reduce their own risk and the high internal cost associated with collecting and validating data from hundreds or thousands of individual suppliers.
- **For the Industry as a Whole:** A unified, data-backed framework strengthens the entire fresh produce sector's social license to operate. It provides a powerful, collective platform for telling the industry's sustainability story and for engaging with regulators, policymakers, and NGOs from a position of strength and credibility.

4. Proactive Engagement with Regulators and Standard-Setters

The industry cannot afford to be a passive recipient of regulation. The data and collective voice generated by the harmonized framework should be used to shift from a reactive to a **proactive engagement strategy**. Armed with robust, aggregated, real-world data on everything from water use to packaging functionality, the Governance Council could engage directly with policymakers and standard-setting bodies.

This is particularly critical in areas where emerging regulations risk being misaligned with the functional realities of the fresh produce supply chain, such as in packaging. Instead of waiting for potentially damaging rules to be implemented, the industry can present its own data-driven framework as a credible alternative or as the basis for developing more effective, evidence-based policy.

This proactive stance is essential for avoiding the "compliance trap" and ensuring that future sustainability requirements are both environmentally effective and economically viable for the sector.

Conclusion: Transforming Assurance into a Competitive Advantage

The fresh produce industry is at a strategic crossroads. It faces an "Assurance Paradox" where the very tools intended to build trust—audits, certifications, and questionnaires—are, through their lack of coordination, causing fragmentation, fatigue, and a dangerous distraction from the core mission of genuine environmental improvement. A passive, compliance-driven response to this escalating pressure is an unsustainable strategy that will only lead to increasing costs, mounting risks, and diminishing returns.

The insights from the industry workshop point to a clear and compelling path forward. The strategic imperative is to launch a collaborative, industry-led initiative to create a harmonized assurance framework. This is not a call for another standard in a sea of standards, but a call to create a unified system that can replace the chaotic patchwork that currently exists.

By embracing the principles outlined in this report—shifting from burdensome practices to valuable metrics, focusing on operational realities, and building a framework from the ground up with a clear value proposition for all stakeholders—the industry can solve the paradox. This transformation will require commitment, collaboration, and decisive leadership. However, the potential rewards are immense. A harmonized

framework will mitigate systemic risk, reduce the collective cost of compliance, and, most importantly, free up the resources, ingenuity, and energy of the industry to focus on what truly matters: driving meaningful and measurable progress in the stewardship of our natural resources.

Ultimately, this is an opportunity to turn a significant burden into a powerful source of competitive advantage. A unified and credible assurance system will enhance supply chain resilience, foster operational innovation, and strengthen the industry's reputation and social license to operate for decades to come. The time for discussion is over; the time for collective action is now.

ANNEX A | DRAFT Fresh Produce Sustainability Charter[7]

Fresh Produce Sustainability Charter

Sustainability is not only integral – but increasingly critical – to the success, prosperity and survival of the fresh produce industry globally. The growing complexity and interdependency of social, economic and environmental outcomes makes sustainability the most important challenge facing the fresh produce industry. This is compounded by the fact that sustainability has significant impacts across the fresh produce supply chain – from production and packing to distribution, retail and consumer consumption. Consequently, all partners along the fresh produce supply chain play an essential role prioritizing, maintaining and improving the sustainability of the fresh produce supply chain. Furthermore, the fresh produce industry's sustainability challenge is global in scope – with the fresh produce industry around the world facing sustainability challenges, be they social, economic or environmental.

As the complexity of sustainability continues to evolve, it is important to question if or how current practices such as audit/compliance are the most impactful strategy for sustainability assurance, and what principles & priorities should guide the industry going forward. An effective and efficient way forward is needed – one that is simple – principles-led, and outcomes based. Furthermore, key barriers should be identified and addressed by way of strategic commitments and actions

PRINCIPLES

In response to this challenge, International Sustainability Summit participants identified key principles that enable fresh produce supply chain sustainability.

Adopt an Integrated Approach to Sustainability

- Recognize the interconnectedness of the three aspects of sustainability: environmental, social, and governance (ESG).
- Adopt a systems-based view that addresses sustainability holistically rather than in silos.

Foster a Culture of Continuous Improvement

- Set, and work towards ambitious yet realistic sustainability goals and targets that drive continuous progress.
- Regularly measure and report on sustainability performance to identify areas for improvement.

Prioritize Global Harmonization and Common Standards

- Develop harmonized, industry-wide standards and best practices for sustainability metrics, reporting, and certifications.
- Align industry sustainability standards and efforts to globally recognized frameworks like the UN Sustainable Development Goals.

Elevate Industry Leadership and Advocacy

- Industry, and industry associations must take a proactive role in shaping sustainability narratives and policies within our industry.
- Advocate for supportive government policies, research funding, and infrastructure investments.

By following these principles, the fresh produce industry can drive meaningful sustainability progress in a coordinated, credible, and impactful manner across the entirety of the global fresh produce supply chain.

STRATEGIC OUTCOMES

Summit participants also identified key outcomes which should be pursued towards improving sustainability in the fresh produce supply chain, including:

Convert to Fully Sustainable Packaging

- Develop industry-wide standards and best practices packaging enabling sustainable fresh supply chains.
- Invest in research and innovation towards packaging suitable for optimum end-of-life management strategies.
- Improve recycling infrastructure and consumer education for better packaging recovery.

Increase Material Use Efficiency

- Promote the examination of waste hotspots throughout the supply chain and implement targeted solutions.

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[7] CPMA/GCFP/IFPS International Sustainability Summit 2024 (https://cpma.ca/industry/sustainability/international-sustainability-summit)

- Collaborate with waste management partners for diversion from landfills.
- Support the development of technologies and practices that mitigate food loss & waste.

Enhance Water Use Efficiency

- Assess water risks across growing regions and particularly prioritize efforts in high-stress areas
- Adopt precision irrigation, regenerative agriculture and other water-efficient practices throughout the industry
- Invest in technologies that optimize water usage at all stages of the supply chain

Embrace Energy Use Efficiency

- Measure scope 1, 2 and 3 emissions to identify biggest contributors at all stages of the supply chain
- Implement energy efficiency, renewable energy, and transportation optimization
- Develop standardized carbon calculation methodologies specific to produce, but aligned to global frameworks

Champion Supply Chain Transparency

- Increase visibility into labor practices, human rights and social responsibility
- Consider certifications like Fair Trade or Equitable Food Initiative for supply chain due diligence
- Adopt international standards like IRIS or the Global Social Compliance Programme, amongst others
- Leverage technology for traceability and accountability throughout the chain

Reinforce Stakeholder Collaboration

- Engage all stakeholders – supplier, growers, retailers, NGOs, regulators, consumers, and standards bodies
- Participate in industry working groups and sustainability initiatives
- Align our efforts to global frameworks like UN Sustainable Development Goals

BARRIERS & RISKS

By prioritizing these areas through a coordinated industry-wide effort, the fresh produce sector can drive meaningful sustainability improvements across environmental, social and economic dimensions, responding directly to the leading barriers and risks to achieving sustainability in the fresh produce supply chain, including:

Lack of Harmonized Standards and Metrics

- Proliferation of different sustainability certifications, reporting requirements from customers and/or governments
- Lack of standardized methodologies to measure and report sustainability performance

Regulatory Uncertainty and Misalignment

- Rapidly evolving and sometimes conflicting regulations around plastics, emissions, labor practices etc.
- Regulations shaped by incomplete understanding of produce industry realities against global standards or frameworks

Insufficient Infrastructure

- Inadequate recycling/composting facilities for sustainable packaging and food waste
- Water scarcity and climate change impacts in certain growing regions

Cost and Resource Constraints

- Sustainable packaging and technologies are often more expensive initially
- Limited financial and human resources dedicated to sustainability initiatives

Supply Chain Complexity

- Global nature of produce supply chains with multiple handoffs and stakeholders
- Challenges in data collection, traceability and driving sustainability across the chain

Consumer Awareness and Participation

- Lack of consumer understanding about sustainability impacts of packaging choices
- Difficulty incentivizing recycling/composting behavior changes

Overcoming these barriers will require coordinated industry-wide efforts, investment in sustainability solutions, supportive industry and regulatory policies and infrastructure, as well as education and engagement of all stakeholders in the produce supply chain.

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