



CLIMICALS

No Fossil Feedstock, No Extra Crops, Just Upcycling Waste into Products

THE PROBLEM WE SOLVE

Many industries need sustainable materials supply

Natural, bio-sourced products are now essential for

- industry roadmaps
- new regulations
- end-customer expectations

Challenge: Nearly all high-value specialty chemicals are petroleum-based and/or imported from Asia

Limited materials/ingredients sourcing options that

- Ensure circularity and environmental responsibility
- Strengthen local supply security
- Remain cost-competitive



HMF IS A GREEN CHEMICAL BUILDING BLOCK A bio-sourced equivalent of the aromatic ring, the fundamental building block of petrochemistry with thousands of applications

HMF Molecule



Applications

- Pharmaceuticals
- Nanomaterials
- Fuel additives and biofuels
- Recyclable plastics
- Epoxy resins
- Fragrances & Cosmetics
- Flavor ingredients
- ✓ Solvents and surfactants

HMF DERIVATIVE OPPORTUNITIES

A growing market opportunity for HMF applications in search of sustainability

Horizon	End Product	Total Addressable Market	Pros and Cons
Short Term	Selected food flavors	2 600 M\$/yr	Up-cycled products differentiation High margin market
	Selected surfactants	1 200 – 1 700 M\$/yr	Large volumes market Bio-sourcing a key to ESG
Long Term	Carbon aerogels	Potential to be confirmed	End market: supercaps electrodes
	Resins / Polymers	Emerging	Mass market



BENEFITS OF OUR PRODUCTS

Our Value Proposition





Surfactants

MICALS

1. Financial Return: Supports profitability through costeffective and sustainable raw materials, aligning with ESG investment criteria.

2. Brand Image: Enhances corporate reputation by adopting and promoting responsible production solutions.

3. Regulatory Compliance: Eases the transition to meeting or exceeding environmental & food legislation.

4. Customer Loyalty: Attracts environmentally conscious customers and strengthens stakeholder trust.

SOLVING A DAIRY INDUSTRY PROBLEM

Supplementing lactose powder production with HMF

Industry Challenge

Low sustainability low value whey permeate management pathway



- Fossil fuel intensive
- Cyclical market
- Aging drying equipment
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Solution

Replacing low value lactose powder with higher value products



- ✓ Seamless integration
- Off-take agreement
- Avoids non-core business investment

UPCYCLING WHEY PERMEATES

From lactose in whey to specific compounds



Our Process

Converts milk industry waste into premium ingredients

- Uses proprietary, low-impact technology
- Delivers high-quality, sustainable output



REPURPOSING WHEY PERMEATE AT SCALE

An excellent feedstock for HMF and value-added derivatives production



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COMPETITIVE LANDSCAPE

Offering sustainable materials to key industries

Technology	Feedstock	Product	Compete on	Avoids food competition	Maximises waste value through value added products	Green process ESG	Chemicals supply security improvement
Climicals	Permeate	HMF and specialty chemicals	N/A	\checkmark	\checkmark	\checkmark	\checkmark
Permeate dryers	Permeate	Lactose powder	Feedstock	\checkmark	×	×	×
Incumbent Chemicals producers	Misc. & Fossil fuels	Flavor ingredients Surfactants	Products	\checkmark	×	×	×
Specialized HMF& Derivatives Producers*	Sugarcane Corn	HMF Derivatives	Products	×	×	×	\checkmark



OUR HISTORY

Converting whey permeate to HMF and specialty chemicals

Prior Development History

- Incorporation (2018)
- Wood vs waste vs crops feedstock (2019)
- Selecting academic partner (Western University, 2020)
- First sample produced (2020)

	2021	2022	2023	2024
•	Process perfected to TRL 4 in lab Coached by <i>2 Degrés</i> , Semi-finalists Food Waste Reduction Challenge	 TRL 5 Investment Quebec Funding Chemical products (non- polymeric) Identified as focus markets 	 Selection of Whey as feedstock Accelerated by Cycle Momentum License on WU's technology 	 Initial Market Traction Partnership with key cheese producer

PARTNERS & ADVISORS

Key players in Climicals' alliance



OUR STRATEGIC ROADMAP

Building the market traction

2024	2025	2026	2	027	
TRL 4	Proof of Concept Phase	TRL 5	Pilot Phase	TRL	L 6 1 st Commercial TRI Demo/Facility
✓ g/ en ✓ Te ✓ De de ✓ Sa	h scale in controlled avironment chnology transfer erivatives pathways evelopment mples to generate arket traction	 ✓ 1 kg env ✓ Deri ✓ Deri ✓ Cor prep 	g/h scale in controlled ironment ivatives pathways isolidation mmercial unit paration		 ✓ 30 kg/h scale at cheese producer site ✓ Derivatives pathways scale-up ✓ Growth phase planning & funding
	Piloting phase				Commercial phase

The TEAM Building the Core Capability

Jérôme Gosset Ph. D.

- Founder & CEO
- Ph. D. Plasma Physics
- R&D and innovation expertise
- 25+ years' VP/directorlevel experience
- Achiever profile

New Hires

Senior BusDev (part time) Process engineer Purification & environment engineer

Co-founder

Business Development Profile External Workforce

Post Doc @ Lab



THANK YOU



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Currently raising funds

Use of Proceeds

- PoC Program
 ✓ PoC commissioning & optimisation
 ✓ Samples production
 ✓ Market intelligence development
- \checkmark Pilot production offtake securitization