



## From Waste to Licensed Value

Zero-Water · Zero-Waste · Process-  
Defined Manufacturing System

**GCIP SA Semi-finalist,  
SA Startup Finalist, Sweat Africa Finalist  
| WIPO IAP | PCT Filed**



# Three Global Crises. One Broken System.



## Waste (Environmental)

Over 100M tons of watermelon waste.



## Water (Process)

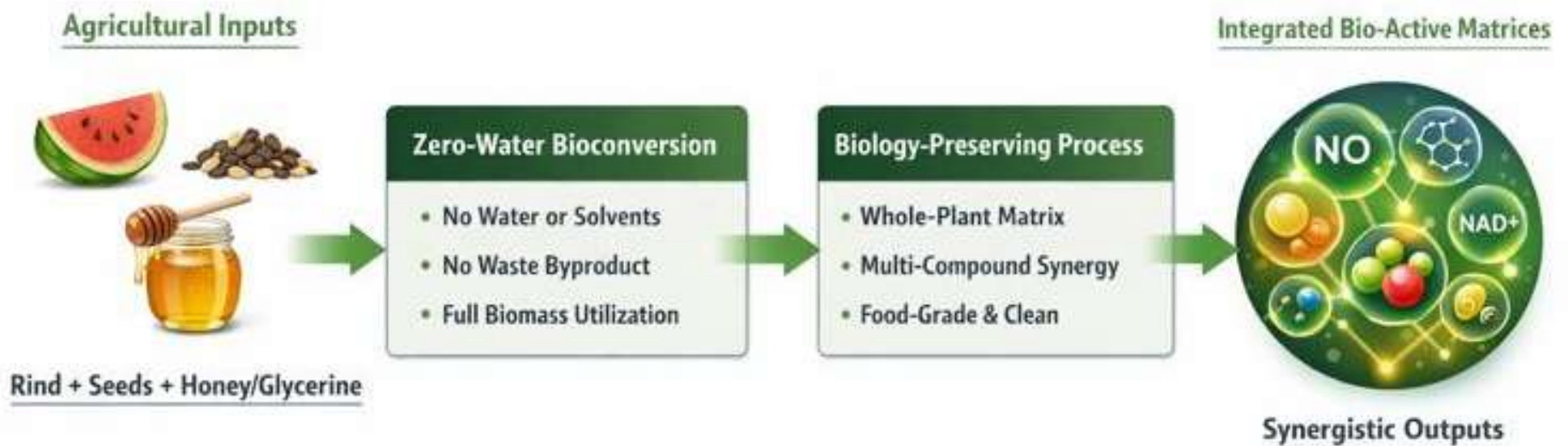
200–500 liters of fresh water for each kilogram of cosmetic ingredient



## Regulation (Performance)

Regulation forces ingredients to be tested alone, then mixed later and hoped to work.

# The new system



A New Standard for Manufacturing Biology, Designed for replication and licensing

Most finalists here are selling a product into a market.  
We are licensing a manufacturing platform into multiple markets globally

# Scientific & Technical Validation



## CPUT (Nutrition)

- High Protein**  
(13.08 g / 100 g)
- Fatty Acids**  
(10.76 g / 100 g)

Protein & fatty acids validated by South Africa's NO.1. applied food sciences program

**BRICS Innovation Centre** Xiamen, China



## University of Stellenbosch LC-MS (Platform)

- Stellenbosch University**  
Validation testing for La Grace Team
- LC-MS, targeted LC-MS
- Zebrafish (safe, bioavailable)
- Verifies synergistic multi-compound delivery

**IPHAR & Hisplacen™**  
(Global De-Risking)

- Lead Optimisation International, (IPHAR, Russia): LOI signed,
- ICH-compliant preclinical partner with pharma expertise
- PCT filed • WIPO IAP Beneficiary**  
(PCT/IB2025/061059)

## Recognition & Commercial Momentum

**GCIP-SA Semi-Finalist**  
Deep Tech (2025)

**SA Startup Awards**  
Finalist (Deeptech)

**BRICS Innovation Centre**  
Xiamen, China

**Beiersdorf** (Germany)

**BRICS Innovation Centre**  
Xiamen, China

**Trichology Assoc.** (USA)

# World-First Zero-Added-Water Innovation



## Zero-Water Extraction

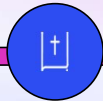
World's first zero-water method, using only honey and glycerine.



## Zero-Waste Fermentation

Preserves bioactives from the entire Citrullus genus (watermelon).

100 % IMPACT



**No solvents. No petrochemicals. Preserves whole-plant bioactives**

Global IP & Licensing Support – Inventor Assistance Program (IAP) Licensing Executives Society International (LESI)

IP structured for international replication, not single-product defence

## IP Protection

PCT/IB2025/061059, process-defined bioconversion securing our unique process.

Entire Citrullus genus (wild & commercial). methods, outputs, and applications across the Citrullus genus

Designed for field-of-use licensing (cosmetics, wound care, nutrition)

## One Platform → Multiple High-Value Outputs

Luxury skincare line (commercial entry point).

Faster regulatory pathway

Establish licensing models

High Margin Low infrastructure

Wound-care hydrogel, dermatology :Eczema/Psoriasis

Tricology (hair loss) Food supplements

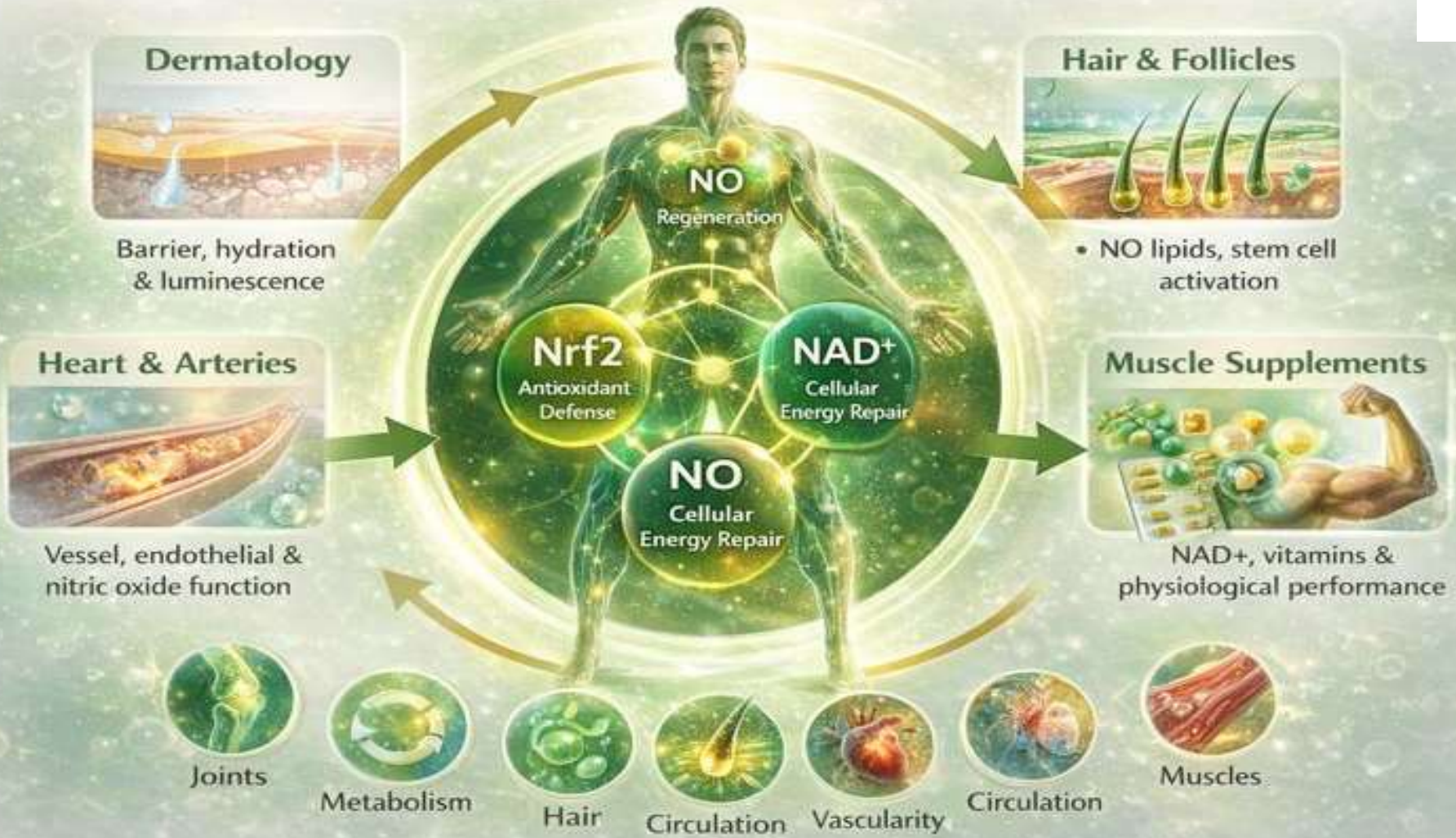
Limited D2C, B2B Ingredient supply – Licensing Scale

These are proofs of the same platform, not separate businesses

**Single input stream. Zero waste. Multiple markets.**

# How Our Platform Supports Human Health & Performance

## Zero-Water Bioconversion Bio-Actives



# Customer Validation

## Customer Interest



Shown interest  
in the concept



**70%** Requested  
*clinical proof*  
(Guiding our validation roadmap)

## Validation Base



**200+** Interviews  
Completed



**40+** Industry Validation  
Surveys  
(Professionals)



**50+** Pilot Users  
*No negative reactions reported*

# Business Model & Go-to-Market Strategy

## From Agricultural Waste to Licensed, Regulated Impact

Capital-light scale through validation, licensing, and partners



# Sustainability



## Quantifiable Impact (2025-26 Targets):

Divert **1,000 kg/month** of agri-waste from landfills.

- Save **~250L of water per kg** of output vs. standard methods.
- Offset **≥5 tons of CO<sub>2</sub>e** per ton processed.
- **Methane X26**

• **Competitive & Regulatory Edge:** Waterless products offer concentrated formulations that combine various benefits, which attracts consumers looking for efficiency. The formulation of waterless products typically involves innovation, such as botanical extracts.

• Source: <https://www.fortunebusinessinsights.com/waterless-cosmetics-market-110537>



Company	Functional unit
La Grace Global	1.2 kg CO <sub>2</sub> e avoided per 30ml of serum
Innovation	Baseline
We use a patented extraction and fermentation process that converts discarded Citrullus lanatus rinds and seeds into high-value bio-actives for cosmetics, food supplements, and medical hydrogels. This upcycles agricultural waste, replaces petrochemical and livestock-based ingredients, and requires minimal water and energy—resulting in a significantly lower carbon footprint.	Traditionally, these functions are provided by petrochemical or palm-oil-based cosmetic serums, imported soy/dairy nutritional powders, and petrolatum-based eczema creams. These conventional products rely on fossil fuels, long global supply chains, and resource-intensive production, leading to high GHG emissions and unsustainable ingredient sourcing.
Per functional unit we use	Per functional unit we reduce
1.2 kg of Linseed produced in region	0.28 kg of Propanol
With a climate impact of	With a climate impact of
<b>0.343 kgCO<sub>2</sub>e</b> [Source: IdeMat]	<b>1.19 kgCO<sub>2</sub>e</b> [Source: IdeMat]

Net climate impact	Number of functional units	GHG emission
Per Functional unit	1	-0.85 kgCO <sub>2</sub> e
For the scale of 2025	12,000	-10 tCO <sub>2</sub> e
For the scale of 2028	120,000	-102 tCO <sub>2</sub> e

## Leadership Team



**Pierre van der Merwe**

Holds ND Human resources, Bcomm.  
Started many Businesses Andy's,  
Bunk Warehouse, Gelato shops,  
Coffee Shops and Coffee Rock  
Roasters. Starting founder of La Grace.  
Holds 12 Patents. Writes short stories

## Advisory Team



**Alexandra Burger, MD**

MD, Lyra Consulting | Engen Board Member

Alexandra Burger is Managing Director of Lyra Consulting and currently a non-executive board member of Engen Petroleum. She has strategic finance and private equity experience. Past area board service at Technology Innovation Agency and Investec Bank.

**Awards & Recognitions:**

- Private Equity Expert of the Year South Africa 24/25 – Leaders in Law Global Awards
- Who's Who Legal 2021–22 – M&A Recognized Practitioner
- Global Leader 2019–23 – Private Equity – Who's Who Legal
- Directors to Watch 2013 – Directors & Boards



**Dr Joanne van Harmelen**

Partner | Adams & Adams | Patent Attorney – Biotech & Pharma

Dr Joanne van Harmelen is a qualified patent attorney and Partner at Adams & Adams, specializing in biotechnology and pharmaceutical IP. She manages global patent filing, prosecution, and strategy for research institutions, universities, and startups across Africa and abroad. Joanne advises La Grace Global on IP protection, divisional filings, and international PCT management, ensuring that innovation and compliance move in step.

**Awards & Recognitions:**

- Chambers & Partners 2024–Patents
- The Legal 500 EMEA (2016–2025) – Leading Partner
- Best Lawyers® Healthcare (SA) 2017–2023

## Consultants

- Prof V.Khazanov,
- Dr Sergei Stankevich
- Victor Sciocatti
- Dr. E Malinausky
- Dr Carol Goodman
- Dr H. de Witt
  
- **Factory 209**
- Prof Carine Smith
- Dr N Bekker
  
- **Roy Hendersohn**
  
- **UVU Bio Team.**
- Vedantha Singh
- Dr David Vlotman
- Stephanus Marais

Appointments in the near future, Fermentation Specialist/AI Bioinformatics, a Regulatory Specialist and a somotologist/lab formulator

# De-Risking & Scaling the Platform

2026/27


TRL 5-6 → 12

 **IPHAR Group**

Applications & Pilot Validation

**Beiersdorf**

Proof-of-Concept Trials

 **Hisplacen** (BioCubaFarma)  
Dermatology & Wound-Care Translation

 **IPHAR Group**  
Applications & Pilot Validation

TRL 5-6 → 12

2028

Scale

**Beiersdorf**

 **IPHAR Group**

**Beiersdorf**

(Cascade) Over Divisions



**Hisplacen** (BioCubaFarma)

Dermatology & Wound-Care Translation

2028

**Beiersdorf**



 **IPHAR Group**

In 30 Countries · Export

**IPHAR Group**

Export EU · US · China



Scale

(Sources: FAOStat, peer-reviewed agri-loss studies)

# La Grace Global — Platform Licensing Market Model



## Partner Pathways & Royalty Potential

- ✓ 🌿 **IPHAR Group** — Active MOU
  - \$350M medical exports
  - Indicative royalty: **\$10-25M / year**
- ✓ 🇨🇺 **Hisplacén** (BioCubaFarma)
  - \$500M export network (50+ countries)
  - Indicative royalty: **\$15-35M / year**
- ✓ 🟩 **Beiersdorf** (in discussion)
  - Selective formulation cascades
  - Indicative royalty: **\$5-15M / year**

• Royalty ranges based on 3-7% of partner's relevant product revenue in target categories.

## Licensing Model Assumptions

- Partner relevant revenue: **\$50-200M**
- Royalty rate: **3-7%**
- Per-partner annual royalty: **\$1.5-14M / year**
- Platform scaling: **Add partners, not CapEx**

# FINANCIAL ROADMAP

Capital to De-Risk · Licensing to Scale

## FUNDING ASK: 2026-2027

ZAR 6.5M | 24 months

- 🔬 Validation · LC-MS consistency
- ☑️ Regulatory readiness
- 🔄 Partner PoC
- 📄 IP national phase

TRL 5-6 → TRL 8-9

## LICENSING PHASE

**\$5-20M / YEAR**  
Indicative royalty potential

2026-2027 → 2028 Onward



## WHY THIS SCALES WITHOUT CapEx

- ✓ Near-zero cost feedstock
- ✓ Zero water - zero solvents
- ✓ Partners fund production
- ✓ La Grace licenses the system

# We Thank You,

Especially Sweat Africa made all this a reality!

for helping:  
Turning African Waste into Global Wellness

PCT/IB2025/061059 | GCIP-SA Semifinalist | Supported by WIPO IAP and LESI

Vision: A zero-water, zero-waste world powered by circular biotech.


Mission: Transforming watermelon waste into high-efficacy skincare, nutrition, and medical innovations.

 Contact

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 [www.lagracebio.com](http://www.lagracebio.com)

 +27 84 499 6279



**La Grace Global is not just selling skincare; we are selling a circular, equitable, and beautiful future.**

## Intellectual Property Portfolio

### Core Patent (Platform-Level)

**PCT/IB2025/061059**

Zero-water, zero-waste bioconversion of *Citrullus* biomass

(Covers process, outputs, and applications across cosmetic, medical, and nutritional use)

### Supporting Provisional Applications (2025)

#### Process & Platform

•**2025/06160** — *Systems and Methods for Processing Citrullus lanatus Biomass via Fermented and Non-Fermented Pathways*

•**pp05cl** — *Multi-Product Fermented Botanical Formulations for Cosmetic, Medical, and Nutritional Uses*

#### Dermal, Wound Care & Hemostasis

•**2025/05955** — *Hydrogel Wound Dressing*

•**Hydrogel Wound Dressing** (additional provisional)

•**2025/05954** — *Skin-Brightening Serum*

•**2025/05452** — *Dual-Phase Surgical Hemostatic Spray with Adjuvant Oncology Benefits*

#### Synergistic Botanical Compositions

•**2025/06343** — *Synergistic Fermented Botanicals: Citrullus lanatus with Aloe ferox for Enhanced Bioactivity*

•**2025/06340** — *Topical and Oral Compositions of Ivermectin, Citrullus lanatus, and Aloe Vera for Psoriasis*

#### Diagnostics & Advanced Systems

•**2025/05489** — *Dynamic Multiplex Diagnostic System with Adaptive Photonic Sensing, Reconfigurable Microfluidics, and AI-Powered Clinical Triage*

•**2025/05624** — *Saliva-Based Diagnostic Kit with Ubuntu AI Integration*

•**2025/05655** — *Self-Sterilizing Surgical Robotics with AI-Verified Sterility*

### IP Strategy

- Platform-first protection with downstream application capture
  - Modular filings enable sector-specific licensing
- Trojan-horse structure: adoption strengthens enforceability

**Supported by WIPO IAP & LESI**

# Sustainability

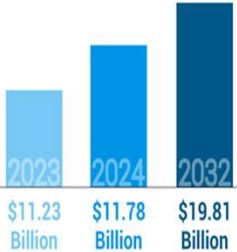
## Global Trend / Pressure



### WATERLESS COSMETICS MARKET



Waterless Cosmetics Market to grow at **6.71% CAGR** by 2024-2032



#### INDUSTRY DEVELOPMENT

Mono Skincare redefined beauty with the launch of the world's first waterless extemporaneous dermo-cosmetics.

#### DRIVERS

- Technological Advancements in terms of Cosmetic Products
- Adoption of Healthy Skincare Routine Among Women



#### TRENDS

Increasing Popularity for Organic & Natural Cosmetic Products



#### BY PRODUCT, 2023

Skincare 35.31%  
Haircare | Makeup | Others



#### CHINA, BY PRODUCT, 2023

Skincare 31.54%  
Haircare | Makeup | Others



#### BY SALES CHANNEL

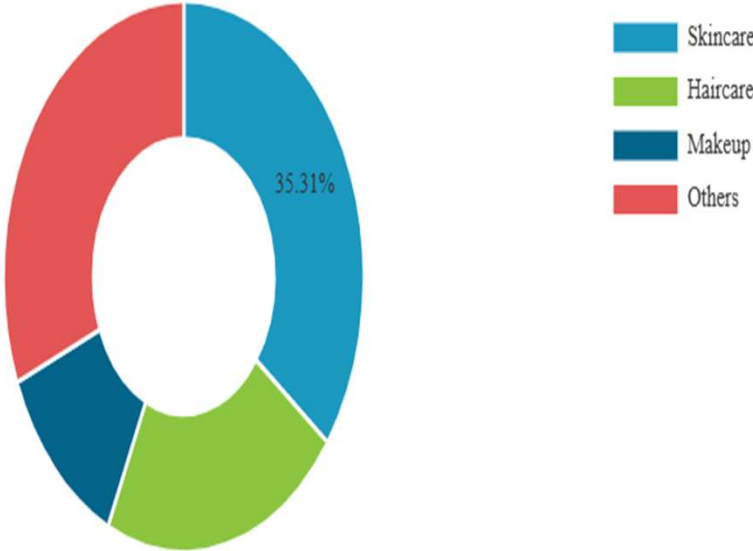
- Specialty Stores | Online Channels
- Hypermarkets/Supermarkets
- Others



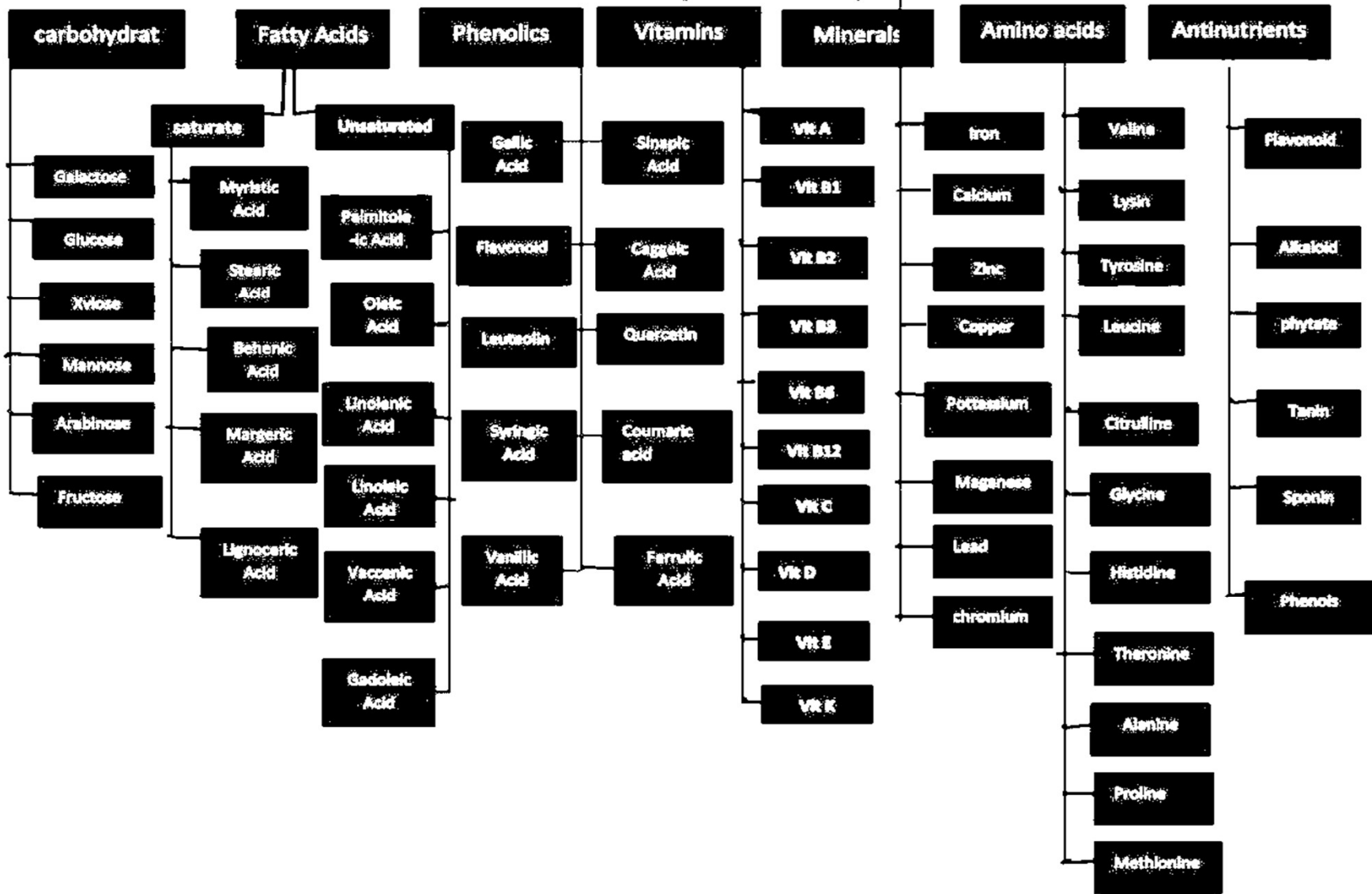
### ASIA PACIFIC



Global Waterless Cosmetics Market Share, By Product, 2024



www.fortunebusinessinsights.com



## Le Grace Global Cash Flow Projections (Royalty-Only P&L)

	Year-2026	Year-2027	Year-2028	Year-2029	Year-2030
<b>Licensing Income</b>	1,000,000	5,000,000	10,000,000	12,500,000	15,000,000
<b>Total Turnover</b>	1,000,000	5,000,000	10,000,000	12,500,000	15,000,000
Total Operating Expenses	2,200,000	4,000,000	5,500,000	6,000,000	6,500,000
<b>EBITDA</b>	<b>-1,200,000</b>	<b>1,000,000</b>	<b>4,500,000</b>	<b>6,500,000</b>	<b>8,500,000</b>
Depreciation	80,000	230,000	230,000	230,000	230,000
Amortization	217,000	850,000	850,000	850,000	1,080,000
<b>Total Depreciation &amp; Amortization</b>	<b>297,000</b>	<b>1,080,000</b>	<b>1,080,000</b>	<b>1,080,000</b>	<b>1,080,000</b>
<b>Profit / (Loss) before Interest &amp; Tax</b>	<b>-1,497,000</b>	<b>-80,000</b>	<b>3,420,000</b>	<b>5,420,000</b>	<b>7,420,000</b>
Total Interest Paid	0	0	0	0	0
<b>Profit / (Loss) before Tax</b>	<b>-1,497,000</b>	<b>-80,000</b>	<b>3,420,000</b>	<b>5,420,000</b>	<b>7,420,000</b>
Total Interest Paid	-1,497,000	-80,000	3,420,000	5,420,000	7,420,000
<b>Profit / (Loss) for the Year</b>	<b>-1,497,000</b>	<b>-102,400</b>	<b>2,598,000</b>	<b>4,116,800</b>	<b>5,568,400</b>
Profit %	(-149.7%)	(-2.0%)	26.0% <sup>****</sup>	32.9% <sup>****</sup>	37.1% <sup>****</sup>
<b>Profit / (Loss) for the Year profit %<sup>~</sup></b>	<b>(-197,000</b> -149.7%	<b>(-102,400</b> 2.0%	<b>2,598,000</b> 26.0%	<b>4,116,800</b> 32.9%	<b>5,568,400</b> 37.1%