Global Bioenergies

A growing player of the environmental transition

June 15, 2021

Listed on Euronext Growth: ALGBE Eligible to SRI investments





GBE at a glance

- Founded in 2008 with the mission to use synthetic biology to build a new industrial world
- IPO in 2011 (« ALGBE »)
- ~50 employees in Paris and Evry (R&D offices)
- Developed a process to produce renewable isododecane





Why?

We need to change our relationship with Nature, and build a world based on sustainable manufacturing

It is incredibly difficult: oil is cheap, and commitments from states to support the environmental transition are insufficient and volatile

To move forward on this difficult journey, need to take the least resistance path



Least resistance path

Start where naturalness has a clear premium \rightarrow cosmetics is the best place to be

Once the process fully scaled up, and the right cost point reached, get ready for larger volumes

→ Need to find a compound having both niche markets in the cosmetics <u>and</u> large commodity markets



Isododecane



- A transversal ingredient in cosmetics:
 - the key ingredient for longwear make-up
 - widely used in skin and hair care
- Validated up to 50% blend in jet fuel

Note: in this presentation, the word « isododecane » also encompasses the sister molecule isohexadecane



Renewable Isododecane

• We produce Isododecane ("IDD") from renewable resources



- Solid IP rights on the biology: unique sugar-to-isobutene process
- Generic technology for the chemistry part; IP on improvements
- REACh compliance; Successful toxicity studies for use of our renewable IDD in make-up



Production ramp-up



R&D started in 2008: synthetic biology, enzymology, process development...

Scale-up efforts started in 2015: > 25,000 learning hours on our pilot and demo plants



Market testing by launching our own make-up brand in June 2021



Now moving to commercial exploitation:

- First small commercial unit under construction in Pomacle, close to Reims, France
- Targeted market: high value natural make-up products
- Operations to start in January 2022
- Leveraging tollers' capabilities for all non critical steps



GLOBAL BIOENERGIES

IDD present in many segments of cosmetics





Focus on make-up







Make-up: What is it about ?



FACE: Concealer Foundation Primer

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Two types of make-up products

• « Normal » : need to apply every ~3 hours

75% of the market (\in 30b – 3 billion units)

• Longwear: lasts for 24h

25% of the market ($\in 10b - 1$ billion units)

- Longwear is a fast growing segment, and has several uses:
 - Executives willing to avoid multiple applications during the day
 - Wet geographies
 - Outwear and sport
 - Wearing masks (no transfer)
 - Nightlife

- ...



IDD in the key ingredient in longwear make-up

IDD is the first ingredient by mass in longwear make up



- IDD selected as the best volatile solvent by >50 years of formulation No substitute having comparable performances
- For now, IDD is only sourced from oil



Unique selling proposition

- **Renewable IDD is key** to bring naturalness to the longwear segment
- We produce the **first and only** renewable, cosmetic-grade IDD
- For the first time, production of end products >90% of natural origin possible → very clear <u>Unique Selling Proposition</u>.
- We decided to move up the value chain and create our own make-up brand to harness the value of this incredible opportunity



Launching LAST[®], the first brand combining a high level of naturalness and longwear performances





June 2021: launching the eyes range









Formulas tick all boxes

- Unique proposition: longwear and >90% of natural origin
- Longwearness also brings waterproof and no transfer properties
- Creamy, comfortable textures
- A wide range of colors combining classical bestsellers and pop shades





How are product performances measured?



Colorimetric testing

- Standardized and controlled application on the skin, and several measures over time - Statistical analysis
- Water spraying to evaluate waterproof performance
- Wiping to evaluate no transfer performance







Objectification by performance scoring conducted by experts

- Controlled application on eyes and lips
- Observation and scoring over time by experts

Auto-evaluation by consumers

- Blind test against a commercial best seller in standardized protocol
- Rating the performances of the products over time
 - \rightarrow Conclusions:
 - 1. Long lasting property (24h)
 - 2. Waterproof
 - 3. Low transfer
 - 4. Highly appreciated for comfort, textures and colors



Packaging is green, too







Mascaras and eyebrow mascaras: recycled PET and recycled PP

Bio-sourced brush

Eyeshadow and liquid lipsticks: glass and metal - unlimited mineral resources Cartboard of secondary packs sourced from sustainably managed forests



Future consumers





→ A broad audience!







Timing

June

September 21





Get first level of brand recognition on domestic market



Start European expansion



Range and Pricing

Principle: same price as the conventional best-sellers in same positioning, naturalness as the sole differentiating factor

- > Mascaras 9ml 25€
- ➤ Eyebrow Mascaras 2.5ml 18€
- > Eyeshadow 5ml 24€







Commercial development

- Start with e-commerce site www.colors-that-last.com
- Create first level of awareness by press coverage and frugal media plan
- Improve on e-commerce settings (SEO, SEA, retargeting...) in test-andlearn mode
- Create a community on social networks (especially Instagram)
- Expand network of influencers and enrich our unique and differentiated biotech-to-beauty tone of voice
- Invest in larger media plan once brand recognition secured
- Develop internationaly though selective retailers





Already in the press



LES FARDS

CES MARQUES TOUTES NEUVES DECLINENT CHACUNE DES FORMULES ET DES EMBALLAGES ECO-FRIENDLY. AVEC UN TROPISME RÉJOUISSANT POUR LES COULEURS VIVES QUI APPELLENT AU JEU ET À L'EXPRESSION DE SON INDIVIDUALITE.



PAR ELISABETH MARTORELL POP GREEN TECH

Tout a démarré avec la formulation de la première alternative végétale à un ingrédient pétrochimique. Ce solvant volatil permettant l'adhésion des plaments sur la peau peut représenter 50 % d'un produit final. Jusqu'à présent, il était indispensable pour garantir les qualités waterproof et longue tenue des fards. Cette belle innovation a donné envie au labo qui en est à l'arigine de lancer sa marque, Last, avec dix-huit références aux teintes vives, mates ou irisées, du mascara aux ombres à paupières (des rouges liquides arriveront en septembre). Ombre à Paupières Uquide Longue Tenue, 12 teintes, 24 €. Mascara Volume Waterproof, 3 teintes, 25 €, colors-that-last.com

Groupe: Global Bioenergies. Circuits de distribution : 5 te internet et à terme distributeum spécialisés. Contenances et prix: Mascaro Voluena Waterproof [3 teinter] 9 ml.25€ Mascare Sourcis Waterprach (3 reinted) 2,5 ml, 18. E. Ombre à poupières liquide Longos Temas [12 mintes], 5 ml, 24€. Date de sortiet join

De la biotech au maquillage, il n'y a su'un lorge pos que Globai Bicenergies siert de tranchir. Unabusiere que cette stant-up est copoble de produire à parir de motières atemières renouvelables att var sionné en isododécone d'arigina naturelle (ou biossurcé). Cerre moiécule es la base de tout un segment du maquillage. culai de la lorque tenne. La rempie a été déseloppée en un on, c'est ce qui foit le côté unique er ogile du modèle, cente biotach va commercialiser à partir du mois de juin une toute nouvelle ligne. LAST prodouers, dans un premier temps, une gamme pour les yeax composée de trais teinies de meacuros, de trais seintes pour les sourcits et de douze teintes d'ombre à poupières (motes et nacrées). Et avant la fin de l'année, une ligne de rouges à lèvres sers lancée.

COSMÉTIQUEMAG LAST LE MAKE-UP

FT

LONGUE TENUE NATUREL

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Four horizons

- Horizon 1: Launch our own brand LAST[®] summer 2021
- Horizon 2: Increase production and sell make-up ingredients 2022/23
- Horizon 3: Increase production further and sell cosmetic ingredients broadly 2024/25
- Horizon 4: Propagate the technology in jet fuel to massively reduce CO₂ of air transportation

Focus on horizons 2, 3, 4 in the next slides



Horizon 2: Ingredients for the make-up leaders

- Ramp-up by building a small manufacturing unit (CAPEX ~€1.5m) in the premises of fermentation toller ARD in Pomacle, France
- Production will take advantage of tolling capacities for fermentation and for the downstream part of the manufacturing chain
- Expected capacity 2022: > 10 million units of make-up



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ARD's180m³ fermenter

• Production will soon exceed the needs of LAST®

 \rightarrow excess production to be sold as high value ingredient to market leaders

High prices are acceptable in long-lasting make-up

€/make-up unit



Example: liquid lipstick

- IDD = first ingredient, but only1.5 gram per unit
- 100€/kg translates in overcost of 0.15€/unit, i.e. <1% of retail price

- → Price >> 100€/kg of ingredient possible at a large scale
- → Existing market: 1 billion units/yr of long-lasting make-up
- → The demand is there: many incoming emails...

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Ramping-up again in 2023: metrics and economics

- Producing in 2023 a quantity of IDD sufficient to naturalize up to 100 million products per year (i.e. 20% of the longwear eyes and lips make-up market).
- High level of revenues expected in 2023.
- Production to be organized mostly through tollers. Low capex.



Horizon 3: a large plant serving adjacent segments in cosmetics

- Production of 10,000 tons/yr, in a market of IDD in cosmetics exceeding 25,000 tons/yr and in quick growth*: IDD is the obvious substituent of volatile silicones, soon to be banned from the whole cosmetics industry
- CAPEX €50-100m to retrofit a plant
- Revenues >€200m (price hypothesis for innovative cosmetic ingredients of about €20/kg)
- Presently reviewing options
- To be commissioned in 2024/25

*source: Frost&Sullivan paid for "Isododecane in cosmetics" study





Horizon 4: Vision in the air transportation

- IDD is already approved for a 50% blend in commercial jet-fuel
- Each ton of jet-fuel substituted by renewable IDD will:
 - Keep one ton of oil under the ground
 - Prevent the emission of 2 tons of CO₂ in the air
- Economics are not working for now, but:
 - Our costs are going down
 - The global demand for efficient environmental solutions is growing

 \rightarrow we will reach a tipping point within a few years

First flight performed in June 2021 using a small airplane and 97% green aviation gasoline to assert our plan in air transportation



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Beyond IDD: Isobutene has a wide product tree



• Many opportunities for manufacturing or industrial collaborations



Our vision and role in the environmental transition

The field of cosmetics will be the first one to completely ban oil and other fossil resources

This exemple to be followed by other industrial fields

Renewable IDD and other isobutene derivatives find applications in cosmetics and in many other industrial fields

We will significantly contribute to the journey towards a better world





Powered by us:

A seasoned executive committee...



Marc Delcourt Chief Executive Officer



Samuel Dubruque Chief Financial Officer



Bernard Chaud Head of Industrial Strategy



Florence Thueux Chief Business Officer



Frédéric Ollivier Chief Technical Officer



Alexandra Ramirez-Moncada Chief Legal Officer

... and a team of ~50 dedicated people active in many different fields





Equity data



The shareholders identified in grey seat are members of the Board of Directors (BOLD as an observer)



The late 2020 step in GBE's valuation occured when we started talking about launching our own brand



This presentation contains certain forward-looking statements that have been based on current expectations about future acts, events and circumstances. These forward-looking statements are, however, subject to risks, uncertainties and assumptions that could cause those acts, events and circumstances to differ materially from the expectations described in such forward-looking statements.

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