Building a purpose-led brand focused on comfort, design and sustainability

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VP Innovation & Sustainability
Allbirds, Inc.
China’s Oil Output Set for Long-Term Slump

From Sugarcane to Shoes
Upstart California shoe company partners with Brazilian chemical giant, ushers new post-petroleum era

By Oliver Zey

SÃO PAULO, Brazil. The New Zealand born soccer player turned-shoe entrepreneur poured some sugar into his caffézinho, the Portuguese word for “little coffee”, a common local tradition to start business meetings. That natural sweetener had been squeezed from stalks of sugarcane that had grown in a field 300 miles to the northwest, in São Paulo state, Brazil. Most of the juice from that sugarcane was converted into crystal sugar that appears on grocery store shelves, while another portion was converted into ethanol, a renewable fuel that’s an alternative to gasoline and can be used by a majority of the cars in the South American country of over 200 million people. Making sugar from sugarcane has been a tradition in Brazil going back hundreds of years, with ethanol becoming common in the 1970s as a response to global oil shocks. Now there’s a new outlet for this sweet crop, and it involves even older transportation traditions: walking and running. Earlier this month, San Francisco-based shoe brand Allbirds started selling the world’s first shoes with soles made from Brazilian sugarcane, using technology provided by Latin America’s largest petrochemical company, Braskem. The story of how the world’s first sugarcane based sneakers came to be starts 7,600 miles away in the island nation of New Zealand. Tim Brown was a professional soccer player for his country’s national team and enjoyed a long and successful career including a World Cup appearance. When it came time to hang up his...
SweetFoam™

{swēt·fōm}-noun

a revolution in sustainable manufacturing
Carbon Footprint Comparison

Carbon footprint (t CO₂ eq./t polymer)

-2.51 (1)
Braskem I’m green™ EVA

+1.84 (1)
Conventional EVA (Braskem)

(1) LCA Study conducted by ACV Brasil/2017 (from cradle to Braskem factory gate)
Shoes That Could Help Save the World

Allbirds SweetFoam

The shoe industry has a big carbon footprint, thanks in part to the fact that many shoe parts—including plastic soles, logos and shoelace tips—are made from petroleum. Retail startup Allbirds is testing an eco-friendly alternative: SweetFoam, a new material made from parts of
Our secret sauce.

Brand
Purpose-driven and irreverent.

Innovation
Superior comfort via material R&D.

DTC
Best value for customers.
Early results are promising

- +1 MM CUSTOMERS
- +80 NPS
- Profitable
THANK EWE

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Engagement and Partnering from a LEGO perspective

Søren Kristiansen
Engagement is Key

The LEGO Group “2030 Materials Ambition”

- Suppliers and supply chain parties
- Universities & technology institutes
- NGO’s and 3rd party organisations
- LEGO Employees
- Consumers, children and the general public
Substitution of resins
Different challenges requires different engagements

Current LEGO products

Future LEGO products

1 to 1 substitution polymer (same chemical composition)

1 to 1 substitution polymer (same physical properties)

Other substitution polymer (new physical properties)
Collaboration with Suppliers

- Building supplier relations through openness and trust.
- High focus on CSR.
- Build capabilities at suppliers to speed up development.
- Risk and cost sharing is decided from case to case.
- Joint Development Agreements.
Partnerships & Memberships

- WWF
- BFA (Bioplastic Feedstock Alliance)
- UNICEF
- Faurecia Bio-Speed Consortium
- Michelin
- L'Oréal
- Danone
- Lego

Our objective: join forces to accelerate the industrial production of suitable intermediates for next generation bio-based materials.
INDUSTRIAL UNITS:
- 29 in Brazil, 6 in USA, 4 in Mexico, 2 in Germany

MORE THAN 7.7k Team Members around the world

PRODUCTION OF OVER 20 MILLION TONS/YEAR of thermoplastic resins and other chemical products

Exports to clients in some 100 countries

EBITDA OF $3.84 BILLION in 2017

NET REVENUE OF $15.4 BILLION in investments in 2017

$52.4 MILLION in innovation investments in 2017

EXTRACTION FEEDSTOCKS
- NAPHTHA / GAS / ETHANOL / SALT

1st GENERATION BASIC PETROCHEMICALS
- ETHYLENE / PROPYLENE / CHLORINE / CAUSTIC SODA

2nd GENERATION THERMOPLASTIC RESINS
- PE / PP / PVC

OPERATING FOOTPRINT

3rd GENERATION PLASTIC CONVERTERS

Braskem
KNOWING THE VALUE PROPOSITION

Engage the market with a flexible business model to find the best match

Where to enter?
Different product value-chains likely have different entry points for a chemical or polymer producer. Flexibility during engagement will help to find the best match.

Automotive vs Retail Packaging
Integrated vs Non-integrated

How is Value Realized?
The impact of material choice on the end-application varies heavily on position in the value-chain and the application itself. Understanding how this evolves through the value-chain helps facilitate adoption.
DISCOVERING THE VALUE PROPOSITION

New chemicals and materials are enablers in the design of product solutions

Technical & Economic boundaries are influenced by materials

Product design is an expression of a balance in priorities

Technically Achievable

Economically Feasible

Product Design

Gold
Glass
PET

Finding this balance can be a collaborative process that helps to reveal the value proposition of a new chemical or material.
ORGANIZING FOR EFFECTIVENESS

Successful collaboration is facilitated through organizational structure.
THANK YOU