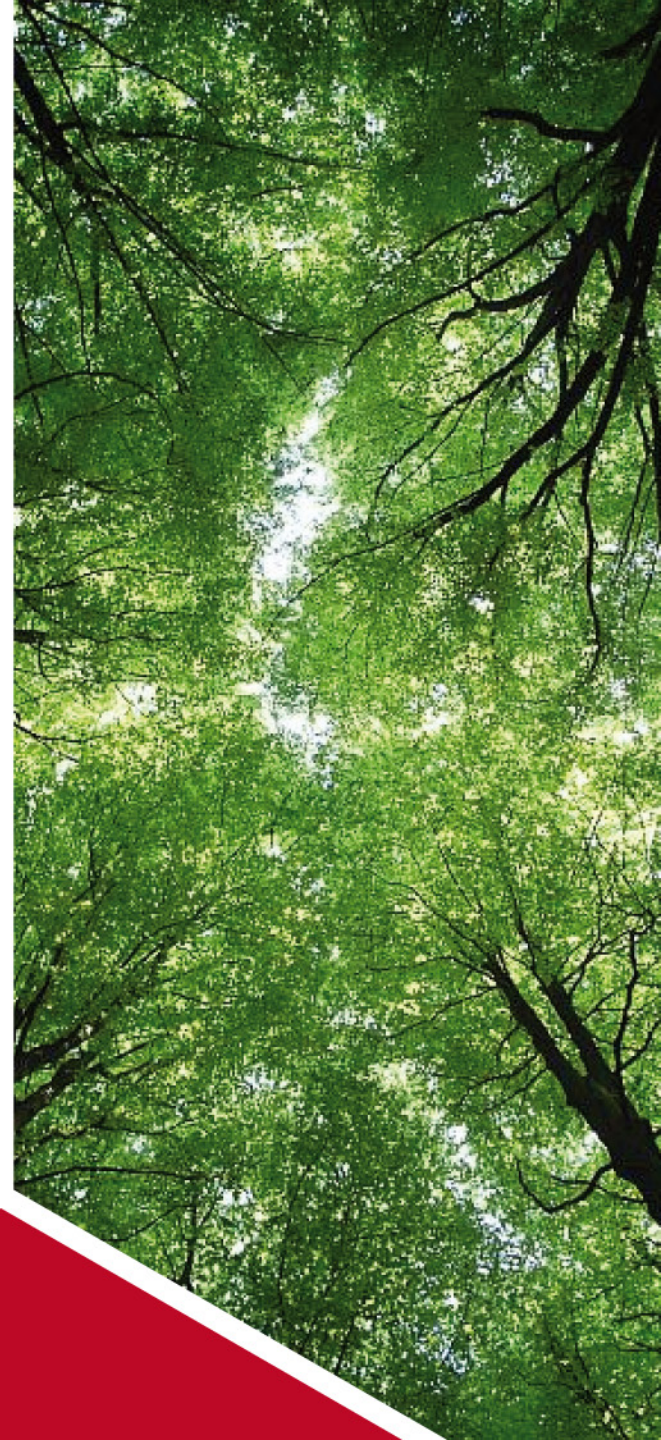




*The Isobutene process:  
short term opportunity and  
long term potential*

*January 2021*

*Listed on Euronext Growth: ALGBE  
Eligible to SRI investments*



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.

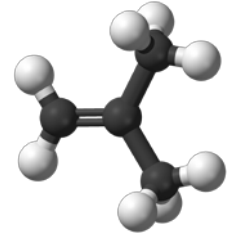
These factors include, among other things, commercial, technical and other risks e.g. associated with estimation of the price of carbohydrate resources, the meeting of development objectives and other investment considerations, as well as other matters not yet known to the Company or not currently considered material by the Company.

Global Bioenergies accepts no responsibility to update any person regarding any error or omission or change in the information in this presentation or any other information made available to a person or any obligation to furnish the person with further information.

## Mission

We prepare a more socially and environmentally responsible world for the next generation

## Producing bio-isobutene



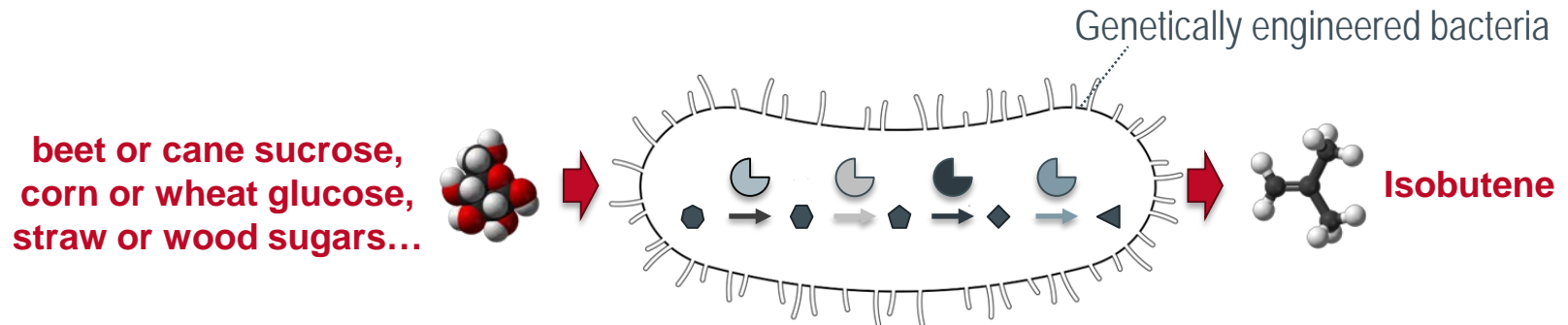
We have developed a unique, innovative process to convert renewable resources into isobutene, a platform molecule widely used in cosmetics and also offering a clear opportunity for sustainable jet fuel

## Why Isobutene?

- On the short term, with oil price < \$120/bbl, all renewable products are more expensive than their oil-based equivalents.
  - Need to target markets where bio-based products are sold with a high price premium
  - Isobutene is THE molecule associated to the largest high-premium market: tens of thousand tons in the cosmetics
- On the longer term, with a higher oil price and/or increasing commitments from States to preserve the environment, bio-based isobutene could become core for sustainable air transportation.

# Unique Science and strong IP

- We have engineered bacteria to convert renewable resources into isobutene, a gaseous 4-carbon building-block molecule traditionally derived from fossil oil (>15 million tons per year)



- We had no biological starting point because Isobutene is not produced in Nature → We created an artificial metabolic pathway, first ever.
- Also, first ever biological process to convert liquid resources into a gaseous product. Key benefits in terms of process design.
- Metabolic and chemical engineering breakthroughs covered by a patiently built IP position.

# The technology is now mature

- Major breakthroughs achieved these last years at lab-scale on yield and productivity
- Pilot and demo plants up and running

**Larger  
plants**

**2012  
R&D in Evry,  
France**

**40L**



**2015  
Pilot plant in  
Pomacle, France**

**500L**



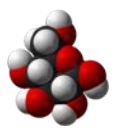
**2017  
Demo plant in  
Leuna, Germany**

**5,000L**



# Two main opportunities

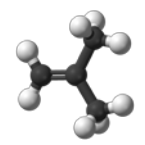
**Industrial sugars**



*Our biological process*



**High value renewable isobutene**



*Well established chemical units*



**High performance cosmetics from natural origin**



**Renewable, sustainable jet fuel**



# Cosmetics

- Several isobutene derivatives are used in the cosmetics, with a current existing market exceeding 30,000 tons/year.
- Global Bioenergies is in a position to bring for the first time the bio-sourced version of these ingredients on the market.
- Market set to ramp up to 100,000 tons/year within a few years:
  - A major emollient for cosmetics is presently being phased out
  - Some isobutene derivatives constitute the best option for substitution, with a comparable level of performance
  - Cosmetic companies are looking for bio-based compounds to increase their level of naturalness

## Sustainable Jet Fuel

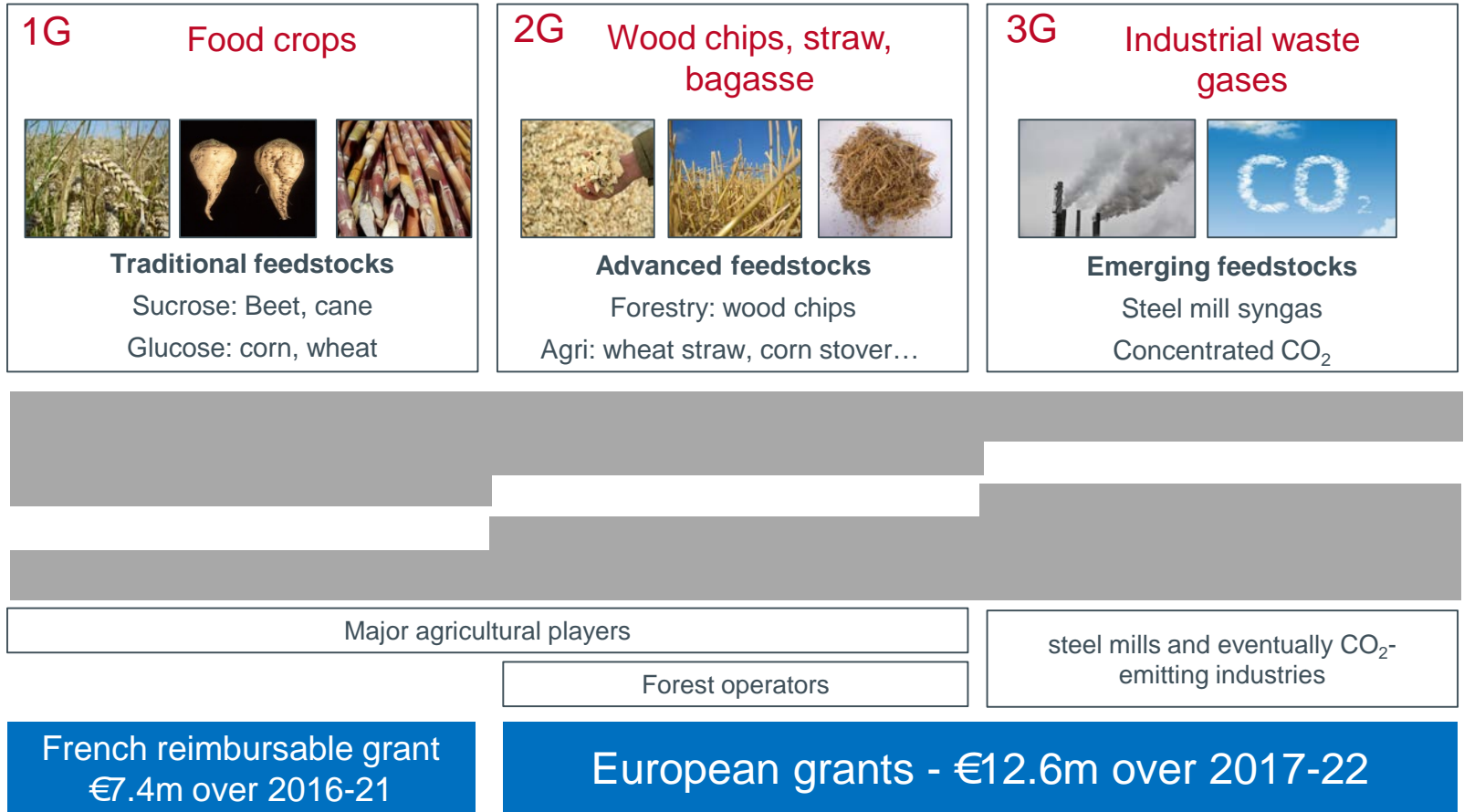
- Before the Covid crisis, jet fuel was the most dynamic segment of the oil industry: +5% per year
- Market of 250 million tons/year, almost entirely based on fossil oil
- Born in Scandinavia, “air shame” is now spreading in Europe and beyond, and already led to the first mandates for Sustainable Jet Fuel
- The whole Europe is moving in the direction of putting mandates in place
- Massive tax incentives soon expected, once the Covid crisis is over and the air transportation resumes
- Only a limited number of technologies suitable for Sustainable Jet Fuel
- Sustainable Jet Fuel application of our Isobutene process: regulatory efforts ongoing in fast-track mode
- Preliminary evaluation by a life cycle analysis company: when produced at a large scale, our isobutene-derived biofuels would emit 3 fold less CO<sub>2</sub> than oil-based fuels



## Moving to commercial scale exploitation

- Our initial project was to jump from our demo plant to a full size plant, with production mainly dedicated to biofuels and only a small part oriented towards cosmetics.
- A Joint-Venture with Cristal Union, named IBN-One, was put in place to get a large plant financed, with CAPEX estimated to €140m.
- We are now rewriting our industrial trajectory, with a more progressive, less capital-intensive, smaller volume and more cosmetics-oriented approach.
- We intend to value our present production as soon as 2021, through a specific high-value retention commercial approach.
- A more precise ramp-up plan, including timing, scales and CAPEX will be provided soon.

# Diversifying the feedstocks to reach lower costs and further improve environmental impact



- €5.7m directly to GBE / €4.6m already received
- €3.3m to IBN-One / €1m already received (accounted at 50% in consolidation).
- The rest will be received based on expenses + financial and technical milestones

€10.8m already received by GBE. The rest will be received based on expenses and technical milestones

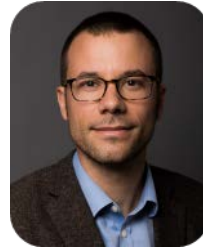
## Executive summary

1. A unique Science, based on an innovative Synthetic Biology approach. Strong IP position.
2. The technology is at late development stage: High performances reached. Scale-up in progress.
3. Business in the cosmetics accessible on the short term, with several Isobutene-derived ingredients targeted.
4. One of the rare technologies having a potential for sustainable jet fuel.

# A seasoned management team...



**Marc Delcourt**  
*Chief Executive Officer*



**Samuel Dubruque**  
*Chief Financial Officer*



**Bernard Chaud**  
*Head of Industrial Strategy*



**Macha Anissimova**  
*Chief Scientific Officer*



**Frédéric Ollivier**  
*Chief Technical Officer*



**Alexandra Ramirez-Moncada**  
*Chief Legal Officer*

... and a board of directors recently reshaped to fit with the short term opportunity of the Company in the cosmetics

**Corinne Granger**  
**Chairwoman of the Board**

Chief Innovation Officer of ISDIN

**Marc Delcourt**  
**Co-founder and CEO**

Entrepreneur with a scientific background. Has founded and managed industrial biotechs since 1997



**Alain Fanet**

Entrepreneur and for more than executive 20 years



**Pierre Lévi**

Former CEO of Faurecia and Groupe Salins

**John Pierce**

Leading American figure of the industrial biology sector, former Chief Bioscientist of BP

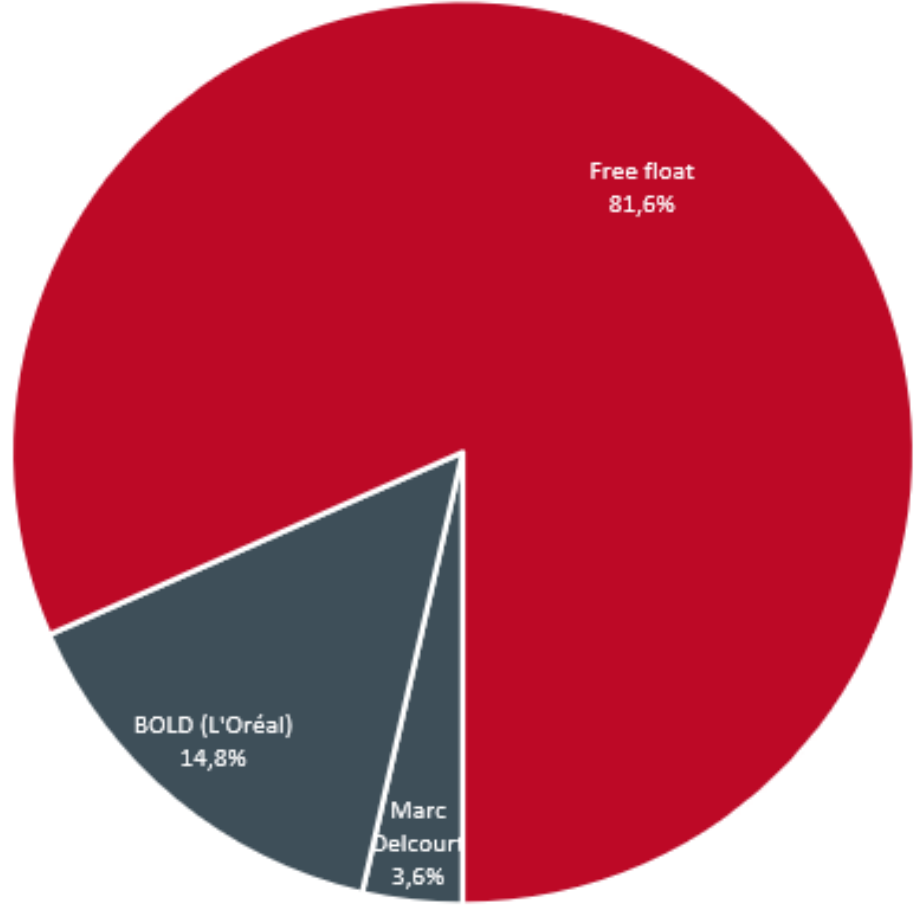


**Muriel Atias**  
**Chief Investment Officer at BOLD, observer**

Long experience in corporate finance (BNP-Paribas, Casino)

**Nicolas Cordier**  
Former CEO of Make-up Forever (LVMH)





The shareholders identified in grey sit at the Board of Directors (BOLD as an observer)