

Connect & Develop: a key element in Purac's journey to a biobased economy

Fabrizio Rampinelli
President and CEO Purac

Sao Paulo
21 November 2012



1

Personal introduction: Fabrizio Rampinelli



- University of Milano – Food technologies
- Bocconi school of Management (SDA)
Milano - Marketing
- Unilever (1986 – 2000)
 - Italy: Marketing – Sales – General Manager
 - Germany: European Marketing Manager
- CSM
 - BakeMark Italia (2000 – 2007): Managing Director
 - Purac (2007 - today): President and CEO



2

Purac journey in BioBased chemicals

- 80 years experience in the development, production and marketing of natural lactic acid
 - Lactic acid is produced out of fermentation of carbohydrates, such as Sugar, Corn starch, Tapioca.
 - Part of CSM, a company active in bakery ingredients and biobased products: transformation of the company in the biobased economy
- Focus on:
 - Food preservation
 - Biobased chemicals, Bioplastic (PLA) and building blocks
- Global manufacturing footprint and sales network
 - Headquarters in the Netherlands
 - Purac Brasil located in Sao Paulo with factory in Campos - RJ
- Turnover of 407 mil EUR (2011) with >1000 Employees
- Growth driven by innovation
 - Innovation spent: 4 % on net sales
 - IP protection through patents and trade secrets
- Purac as a "Fermentation powerhouse"
 - Fermentation is a key competence for Purac
 - Developing new biochemical platform molecules
- Sustainability is driving Purac's strategic choices



3

Purac/CSM has operations in Brazil since 1962

- Lactic acid & derivatives plant in Campos - RJ
 - State-of-the-art facilities
 - Cane sugar as raw material
 - Servicing customers throughout Latin America and supplying Purac global network
- Latin America regional HQ in Sao Paulo



**Purac site
Campos, Brazil**



4

Sustainable Sourcing and CSR at CSM/Purac

Sourcing philosophy: Partner with suppliers to comply with comparable standards and build sustainable value



BONSUCRO™
BETTER SUGAR CANE INITIATIVE

purac
pure by nature



CSR Projects Purac Brazil:

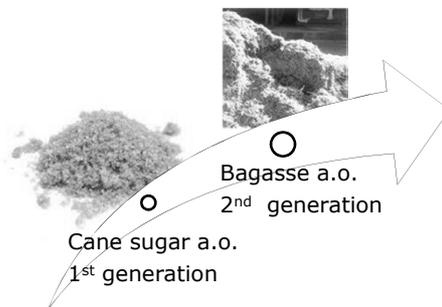
- Eco-Citizen project in Campos with focus on creating environmental awareness
- Partnership with Federal University on soil improvement through use of biomass
- Community support through tree planting and flood relief
- Young Apprentice Project in partnership with Petrobras to educate poor students
- Donation of wooden pallets to manufacture furniture
- Donations to local organizations involved in sustainability initiatives

5

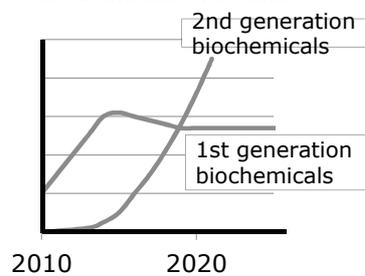
Innovating for next generation feed stocks

Why?

- Better use of resources
- No conflict of interest with food supply
- Less volatility in raw material pricing
- More flexibility in substrates



Production capacity G1 and G2 biochemicals over time



purac
pure by nature

6

Challenges of a biobased economy: Value chain approach

- The development of a biobased economy requires sharing of distinctive and different capabilities existing in various parts of the value chain:
 - Connect & develop with various research partners
 - Business cooperation with industry partners e.g. J.V. BASF-Purac for biosuccinic acid
 - Participation in Public-Private-Partnerships (PPP) e.g. BPF and BE-Basic:



7

Purac is investing consistently in the development and processing of next generation feedstock

The Netherlands:

Rest of world:



8

Purac interest in Brazilian partnerships

- Feedstock for the production of biobased chemicals.
- Conversion of agro feedstocks into fermentable substrates (pre-treatment of biomass).
- Participation in biorefineries to optimize the economics of biobased chemicals production
- Open economy to biobased initiatives.



9



a  CSM company

10