



# moqu

## Mycoplast

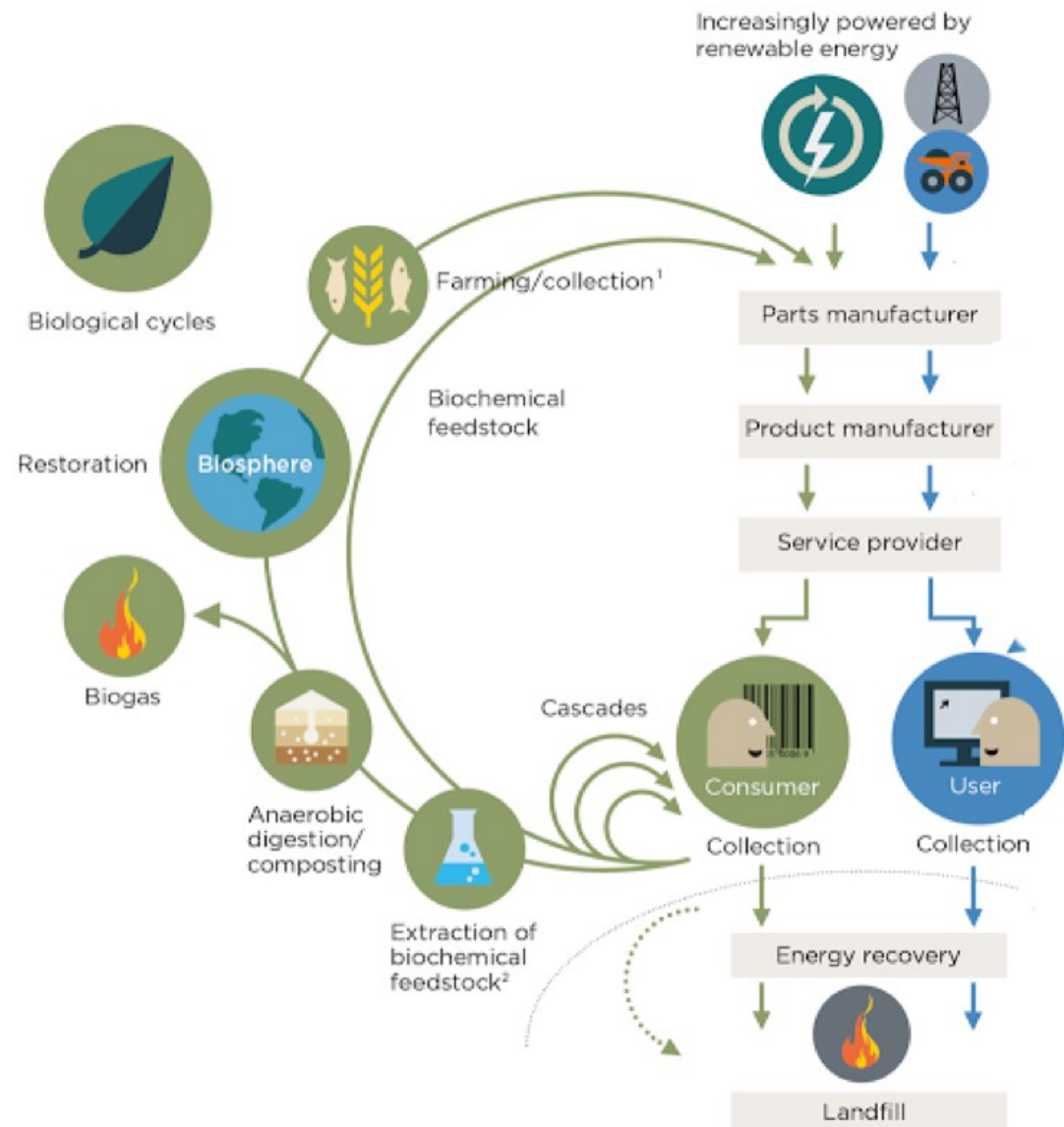
Industrializing Natural Processes

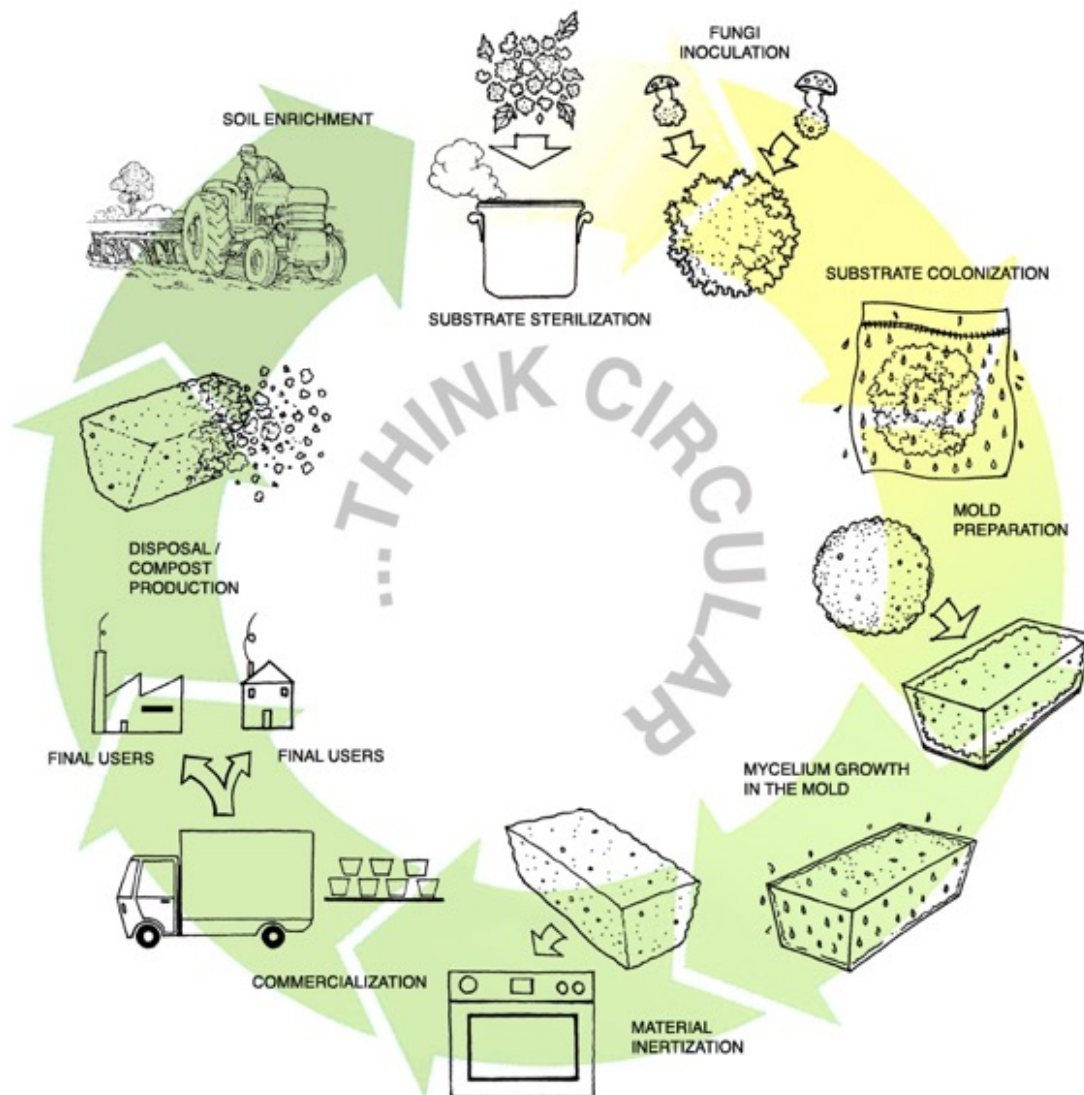
### COMPANY PRESENTATION

Arras, June 20th, 2017









✓ agro-residues



✓ food co-products



✓ bio- energy residues



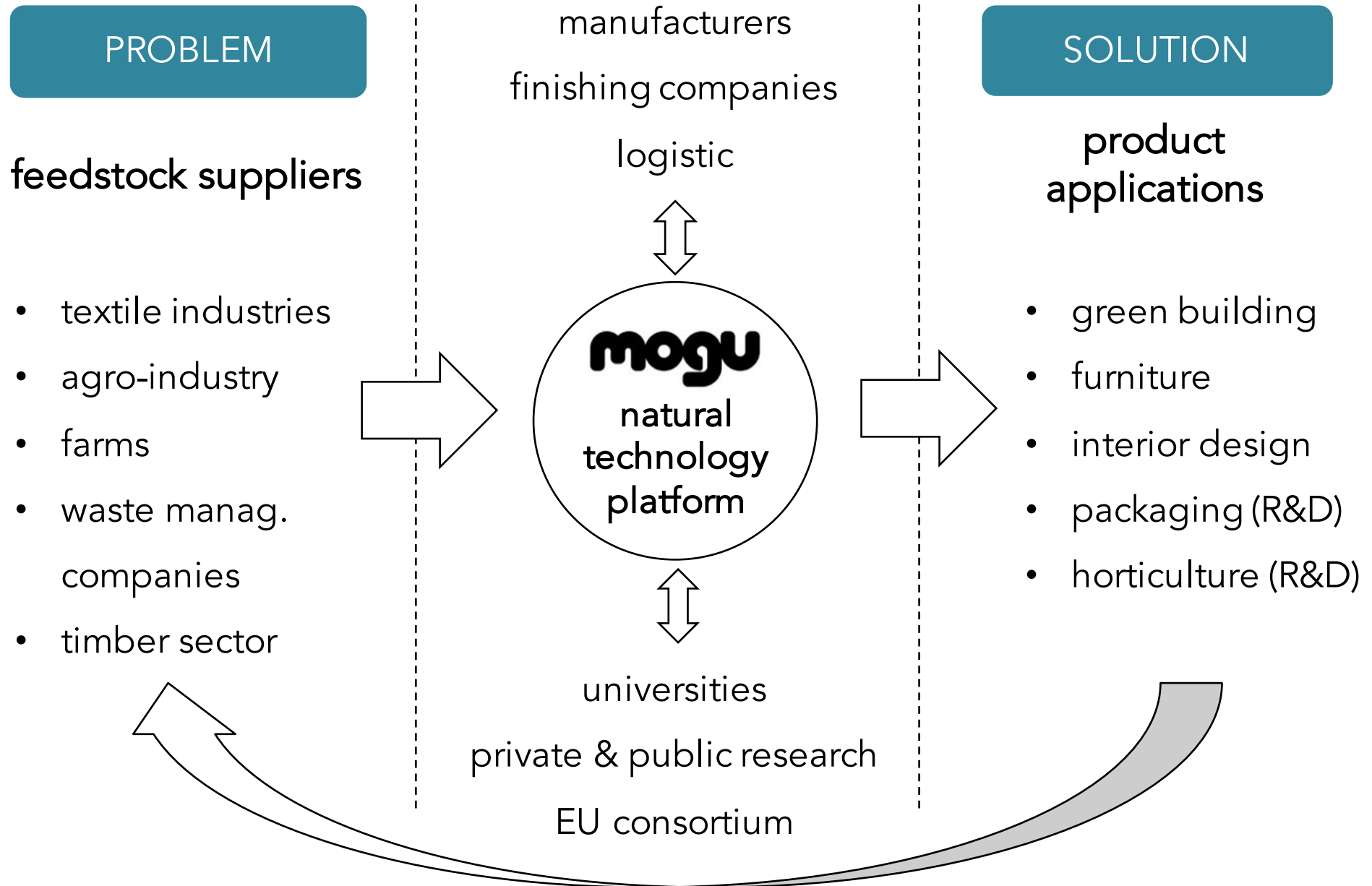
✓ textile waste



✓ timber residues



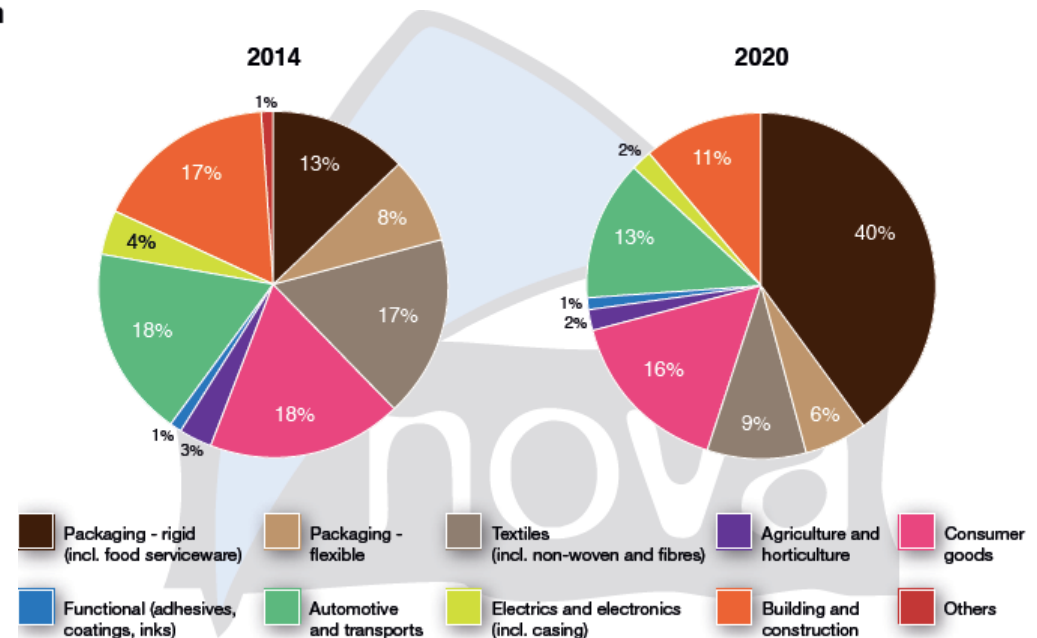
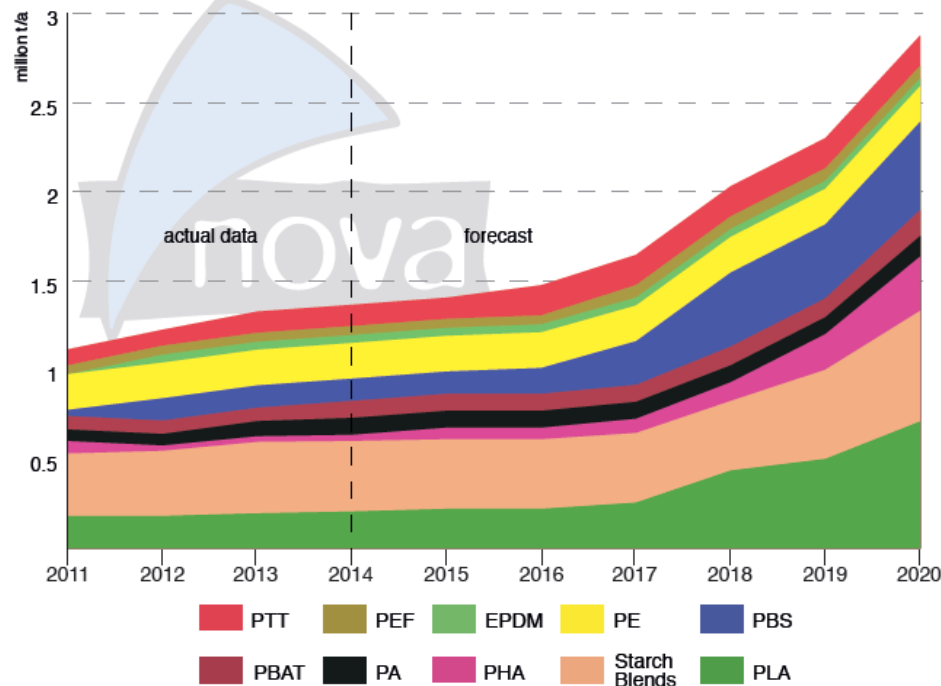
# Value proposition



Bio-polymers from residues represent a sustainable opportunity in an increasing market

- 1,8 Mton (4 B€) in 2015
- 3 Mton (8 B€) by 2020

**Selected bio-based polymers: Evolution of worldwide production capacities from 2011 to 2020**

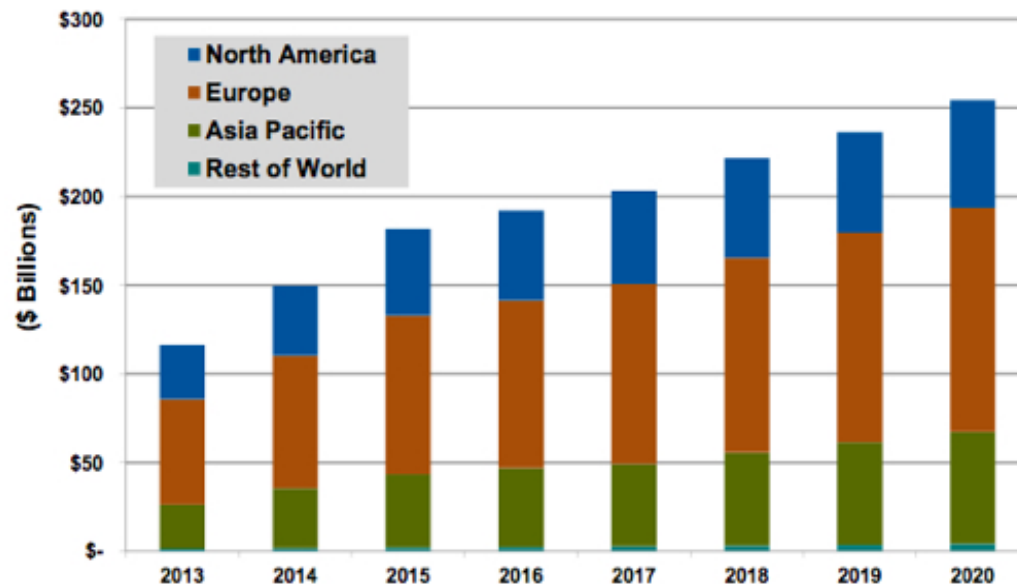


Source: Nova Institute



- Green building (100 B€ in EU – 19% annual growth rate)
- Flooring market (50 B€ in EU)
- Insulation solutions (6 B€ in EU)

Chart 1.1 Market Value of Green Construction Materials by Region, World Markets: 2013-2020



(Source: Navigant Research)



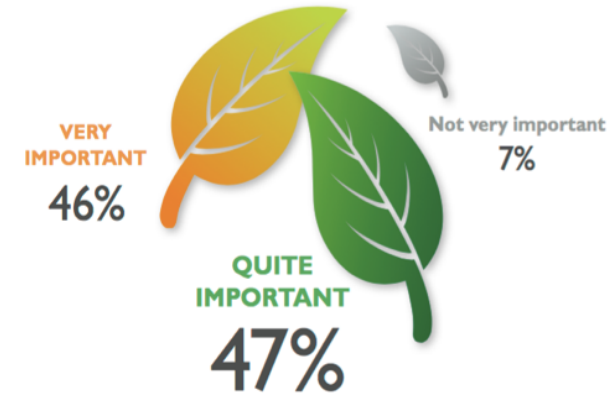


# Mogu Home Products

Mycoplast is developing and commercializing **bio-panels and tiles** (Mogu Home) for:

- flooring
- interior design (bio-architecture)
- green furniture

5. WHEN DEVELOPING OR INVESTING IN NEW BUILDINGS HOW IMPORTANT IS GREEN CERTIFICATION?





# Mogu Home

MOGU Home panels and tiles can be industrially finished by making use of diverse coating systems, allowing to improve a range of technical performances.

Characteristics	Standard	
Panel size		600 x 600 mm
Thickness		> 8 mm
Fire resistance behaviour	EN 13501-1	Cfl, S1
Thermal conductivity (W/mk)	EN 12664	0,100
Acoustic insulation (dB)		30
Slip resistance	EN 13893	Safe surface
Abrasion resistant	EN 425	no damage







## Mogu R&D projects

---

Thanks to the versatility of the composite materials from mycelium, Mycoplast is also involved in demo-projects (Horizon 2020 and PPP) for the production of solutions dedicated to massive markets, such as

- ✓ Rigid Packaging (secondary and primary)
- ✓ Horticulture





# Company development

Mycoplast development strategy is based on three main pillars:

- Technical development of materials and products
- Brand and market development
- Industrial scale up

The strategy consists in the implementation of three phases:

1. Pilot phase
2. Demo phase
3. Commercial phase







# Company development



Phase I  
Pilot scale - 40 ton/y

12 month  
(2015-2016)



Phase II  
Demo scale - 1,000 ton/y  
in partnership with a player of mushroom industry

36 month  
(2017-2020)



Phase III  
Commercial scale - 5,000 ton/y  
(licensing)

by 2021



CP1 panels (long fibers)



CP2 panels (long fibers)



**mogu**

Brand development

---

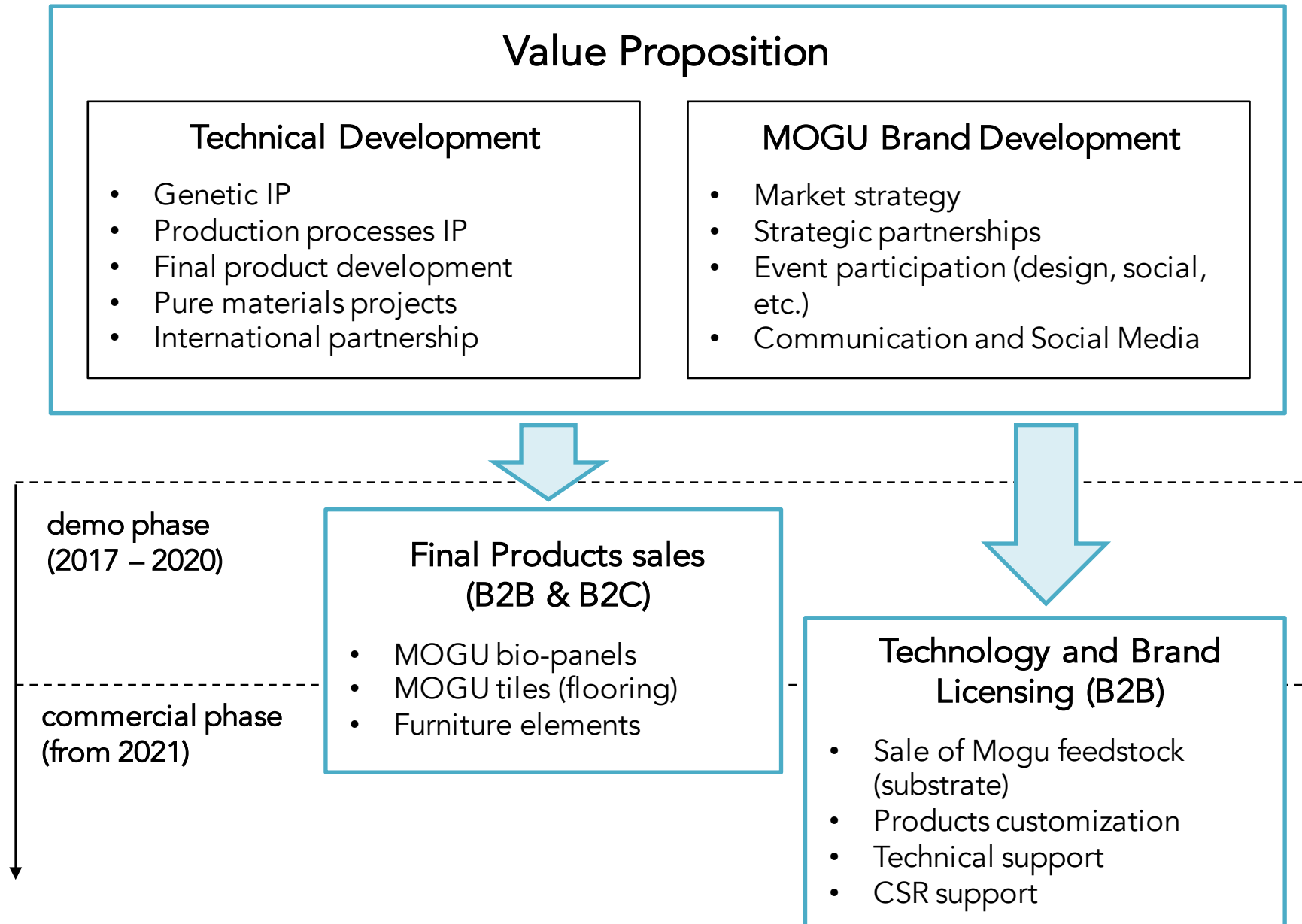


**mogu**





# Business strategy







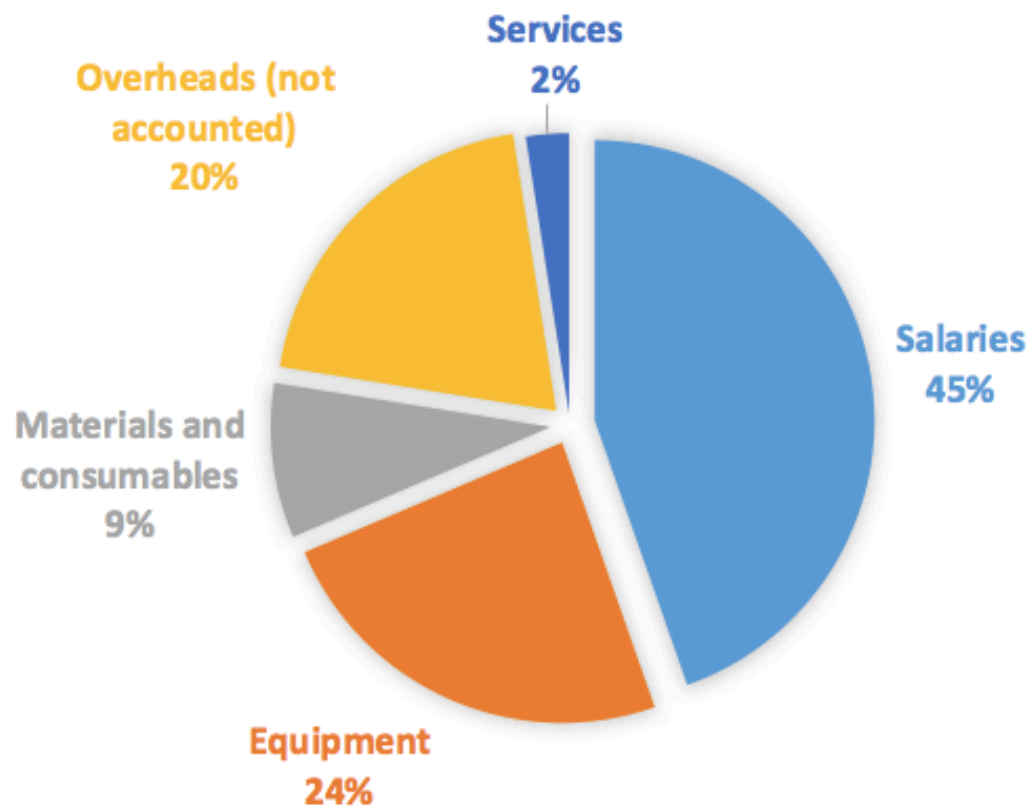
# Company Milestones

## Target achieved

- ✓ Prizes and awards in Circular Economy
- ✓ Pilot plant in Varese Province
- ✓ Excl. know-how agreement with Utrecht University
- ✓ Partnership with Pavia University (fungal strains)
- ✓ Technological partnerships for product dev.
- ✓ Strategic partnerships with final users
- ✓ Company Acceleration Programs
- ✓ Seals of Excellence SME Instrument H2020
- ✓ 2 EU Granted Consortiums participations
- ✓ Market entry (MOGU home pilot scale)



## EU FUNDS 2016-2021 (TOTAL € 423.500)





# Company Milestones

---

## Next steps (short term)

- Start-up Demo Plant (1 kton/year – 1<sup>st</sup> module) by June 2017
- IP on fungal genetic (optimized mycelium strains) by July 2017
- Partnership with Dutch Mushroom Industry by July 2017
- Final products certification by Sept 2017
- Company Team expansion in Varese by Sept 2017
- Market entry demo scale by Sept 2017







# Team & Advisors



## CEO – Stefano Babbini

Manager in agro-industry and bio-energy sector  
3 start ups



## Director of Research – Maurizio Montalti

Designer and industrial engineer bio-materials  
Founder *OfficinaCorpuscoli*, International grants&prizes



## Business Partner - Federico Maria Grati

Manager bio-chemistry industry  
3 start ups, Best Fulbright, GSBI



## Product Designer – Francesco Giannetti

Designer, Architect



## Product Manager – Francesco Amadio

Energy Manager, Environmental Engineer

## Company Advisors

### Han Wösten

Professor Microbiology  
Utrecht University



### Sara Cristaldi

Press Office Milan Mayor  
Expo 2015



### Carlo Bonadonna

Business Advisor  
Innovative Industries



### External relations – Natalia Piatti

Sociologist



### Lab responsible – Mirko Pellegrini

Biotechnologist



### Lab assistant – Marco Cartabia

Mycologist

Stefano Babbini – CEO

babbini@mycoplast.com

**moqu**

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



...thanks for talking about us!

