

# milliBETER<sup>®</sup>



Waste



Larvae



Resources

# Millibeter



*Hermetia illucens*  
Black Soldier Fly



# Value Chain: Phase 1

- Semi-automated breeding center
- Production: 750 blisters containing 20.000 larvae
- Capex: € 0,24 mio

- Feedstock: Supermarket waste
- Daily capacity: 40 t
- Output: fresh month larvae, 6t/d
- Capex: €2 mio

- Proprietary extraction technology
- Inputs: Fresh month larvae
- Dry Matter Content: 40%
- Output: fine chemicals, 2t/d
- Capex: € 1 mio

Milli Breeding  
MILLIBETER<sup>®</sup>

Milli Ferti  
MILLIBETER<sup>®</sup>

Milli Finch  
MILLIBETER<sup>®</sup>

Day larvae

Fresh  
month larvae

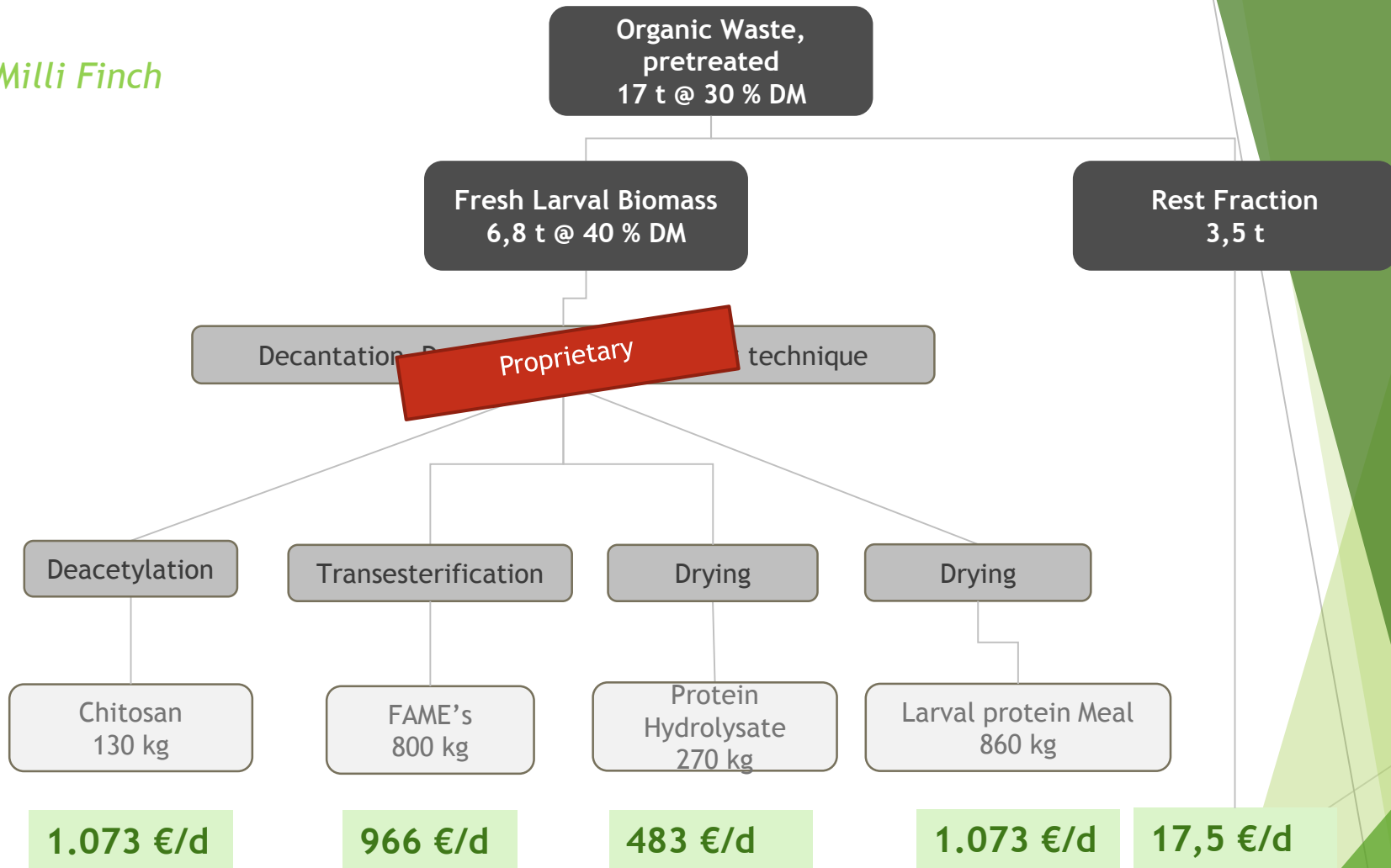
Fine chemicals

R&D

B2B customers

We'll nail it before  
we'll scale it

--- External parties  
— MilliBeter Group



# Technology

# Waste treatment



Supermarket



Agriculture



Manure



Slaughter



# Valorisation in feed?



Aquaculture



Pigs

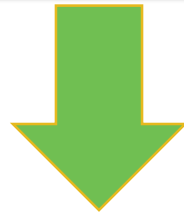


Poultry

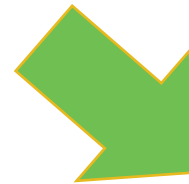
# Valorisation in petfood



Koi carps



Aviary Birds



Cats & Dogs

# Chemical compounds

## Lipids: fat/oil



Detergents



Lubricants



Soap

## Specialty Chemicals: Phospho-Lipids, Glycerids



Pharma



Cosmetics



Veterinary Pharma



Nutrition



# Chemical compounds

## Protein



Glue



Coatings

## Specialty: Peptides



Pharma



Cosmetics



Veterinary Pharma



Nutrition

# Specialty Chemicals

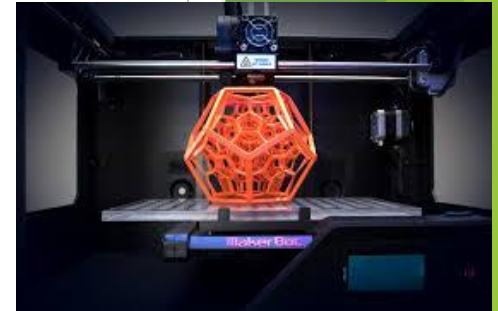
## Chitin



Flocculant



Paper



3D-printing

Specialty: Chitosan, Chito-Oligosaccharides, Glucosamine



Pharma



Cosmetics



Feed Additives



Surgery

# Research Projects



agentschap voor Innovatie  
door Wetenschap en Technologie

## M2LARV

LV Hanssens Mostaert  
NV Vermeulen Construct  
Millibeter  
Ugent  
ILVO

0,8 mio €  
Millibeter 180k €  
4/2014-3/2016

## CHITINSECT

Millibeter  
Avore, Chemstream  
I-Coats, Globachem  
Ugent, KUL, VITO  
BioBase Europe

1,2 mio €  
Millibeter: 300k €  
1/2014 – 12/2015

## Feed&Food

Millibeter  
Nutrition Sciences

0,3 mio €  
Millibeter: 206k €  
11/2013 – 10/2015

# Research projects



## Palm-0-Free

Ugent  
Lotus, Vandemoortele,  
FujiOils, Puratos,  
Princeps, etc

5/2014-4/2016



## In2Broiler

Thomas More Kempen  
Usersgroup: Boerenbond,  
AVEVE,  
BeMeFa, Biobest, etc

0,4 mio €  
Millibeter: supplier  
11/2014 – 10/2016

# Flying a 3-stage rocket





# Beyond our focus... within our capabilities



Confidential



miLLiBETER<sup>®</sup>

Let's make the future fly!