



# Circular 3d

A digital platform that finds  
the best sustainable material  
for your product!

# Problem



14 %

is the worldwide  
average recycling  
quote

54 %

of the world's energy  
are consumed by global  
manufacturing

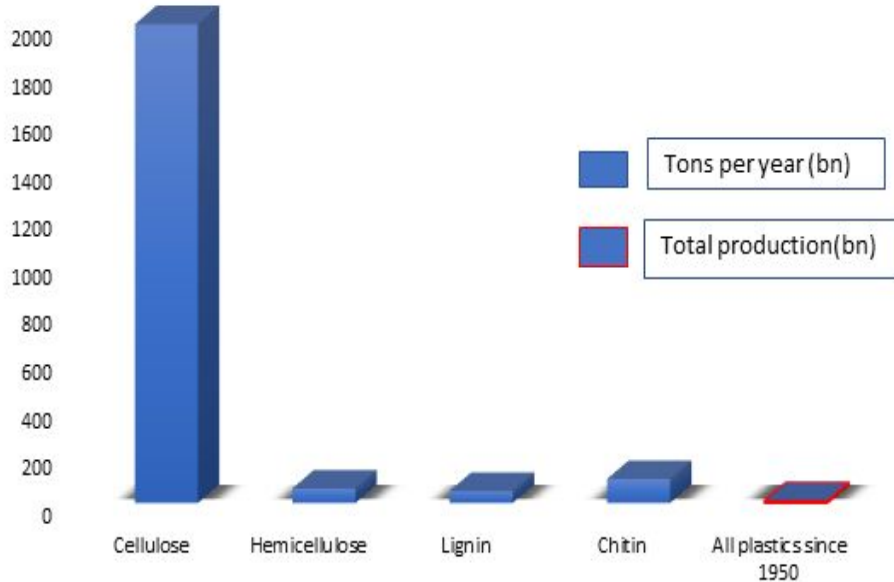
> 80 %

of customers want to buy  
environmentally  
conscious products

> 90 %

of every conventional  
plastic material can be  
replaced with a bioplastic  
alternative

# Organic Material vs. Plastic Production



# BioMaterial



provide conventional plastics ID,

obtain closest bioplastics  
alternative offered by a supplier

optimize for the best bioplastic  
alternative in particular product  
- 3D file upload (CAD)

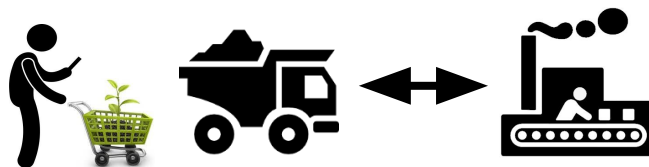
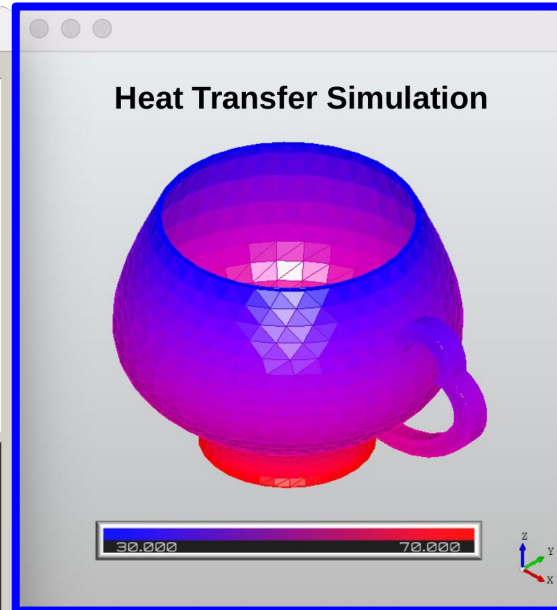
**BioMaterial Finder**

Material Parameters

Material Identity	PET
Density (kg/m <sup>3</sup> )	1200
Young Modulus (Mpa)	1400
Poisson Ratio	0.35
Thermal Conductivity (W/m/K)	0.15
Expansion Coefficient (mum/m/K)	90
Specific Heat (J/kg/K)	1500

Find Best Plastic Material

	1	2	3
1	Material Supplier	Material Name	score
2	Bio+Tic	Bio-PET	20.8
3	Green4U	Bio-PP	209.4
4	Green4U	PHA	611.4
5	Bio+Tic	PLA	923.0

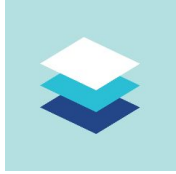


**Application-Specific,  
Polymer Compounds, ...**



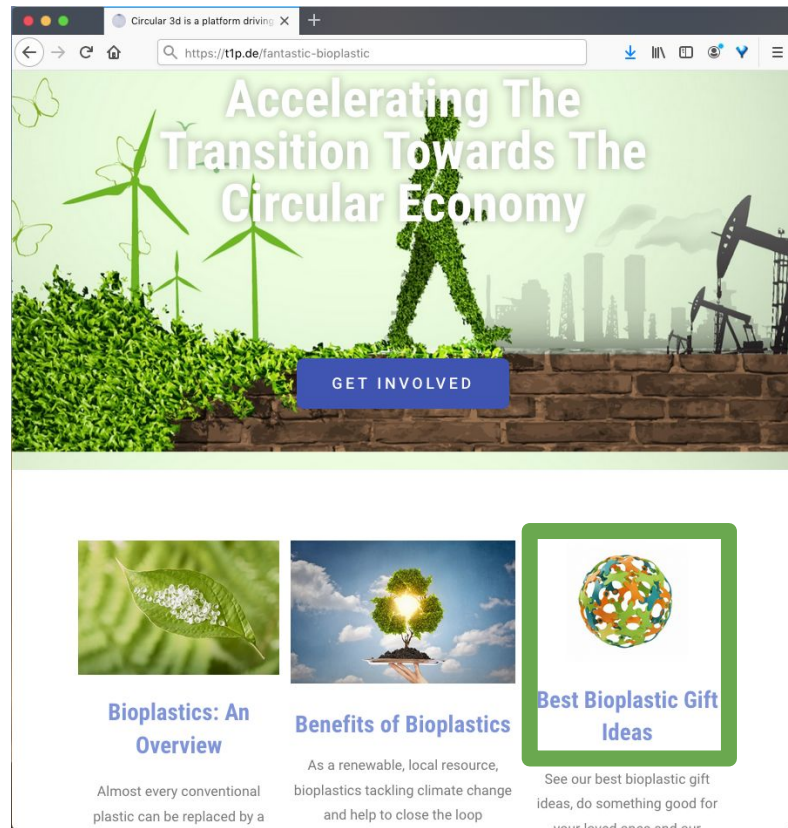


# Education



End customers inform themselves about **Sustainable materials and Products**

[www.circular3dprinting.com](https://www.circular3dprinting.com)



# Client Benefits



## Sustainable Impact

- Helps to save energy and CO2 emissions



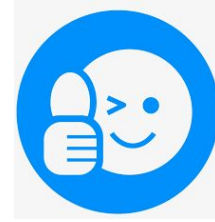
## Cost Savings

- Highlights the right products with the best prices
- Neutral decision system



## Speed and Quality

- Helps to find the right material that improves part quality
- Saves time because of quick matching process



## Usability

- Viable and enjoyable for users to use

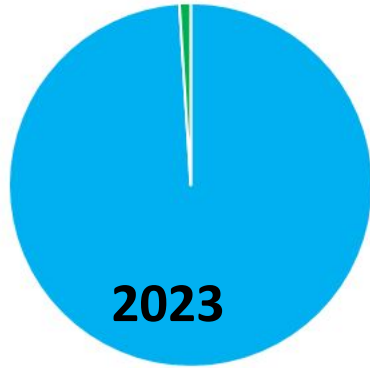


## Open Potential

- Solution could be used for other manufacturing technologies

# Addressable Market

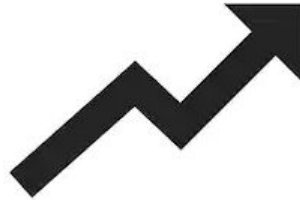
Bioplastics 1,5 %



€ 658 B

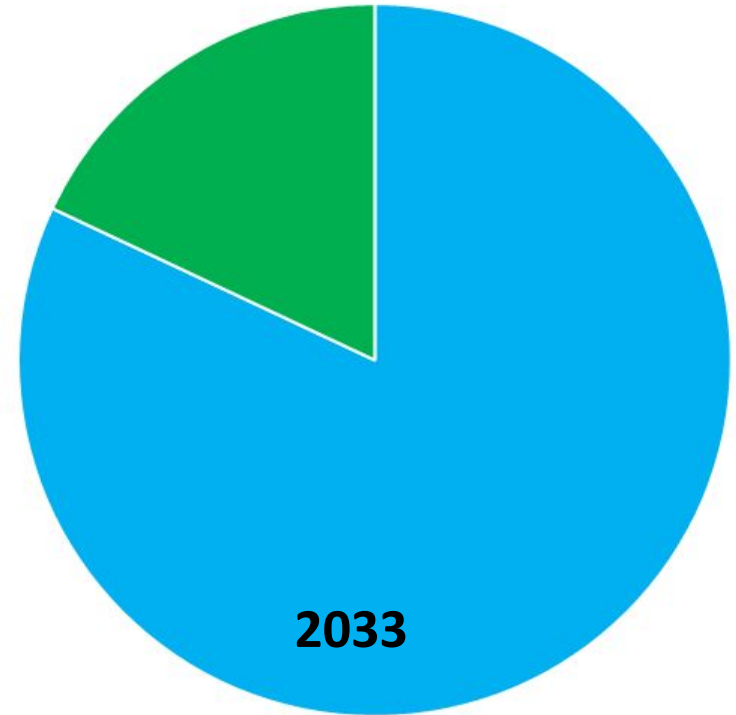
Global Plastic Production

CAGR:  
20-30%\*



\*Depending on various factors

Bioplastics 18 %



€ 1,050 B



# Market Drivers

*Increasing customer demand*

***Plastic Tax***

***Health***

***Online Trend***

***Subsidies***

***Scale Effects***

***Policy  
Engagement***



***Corporate Vision***



***Scientific  
Breakthroughs***



***Green New Deal***

***Big Brands adopt  
bioplastics***

***Oil depletion***

***New  
technologies***

# Business Model

Online Platform

**Advertising**

**0.20 €**

Cost Per Click



Free Software

**Commission**

**5 %**

On Product Sales



Paid Software

**Fixed Fee**

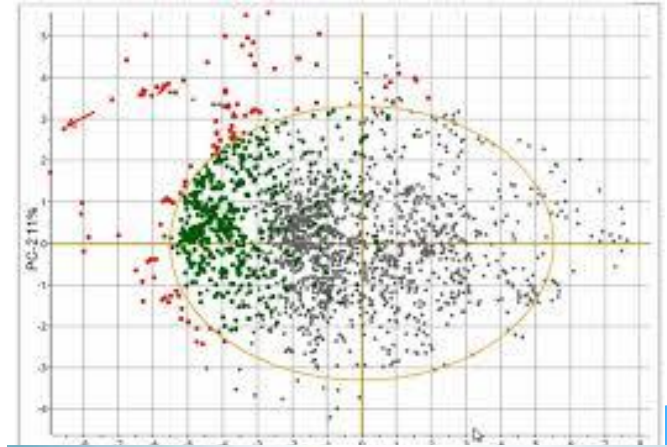
**60 €**

Monthly / user



# Next Steps (MUP)

- Data integration of more materials
- Matching Process with desired properties
- Closed Pilot Program



# Client benefits



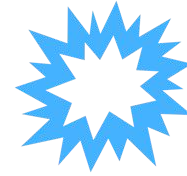
## Speed and Quality

- Helps to find the right material that improves part quality
- Saves time because of quick matching process
- Very userfriendly due to it's simplicity



## Cost savings

- Customer saves money because solution highlights the right products with the best prices
- Neutral decision system



## Open potential

- Solution could be also used for other applications like predictive maintenance

# Client Benefits



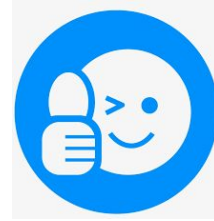
Sustainable  
Impact



Cost Savings



Speed and  
Quality



Usability



Open Potential



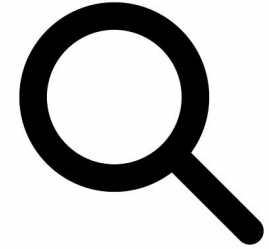
# Competitive Advantages



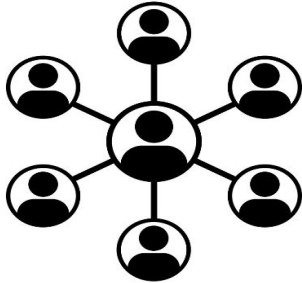
1st to Market



Ease of Use



Specialized  
Portfolio



Network Effects



Trust through  
Reviews



Neutral Decision  
System