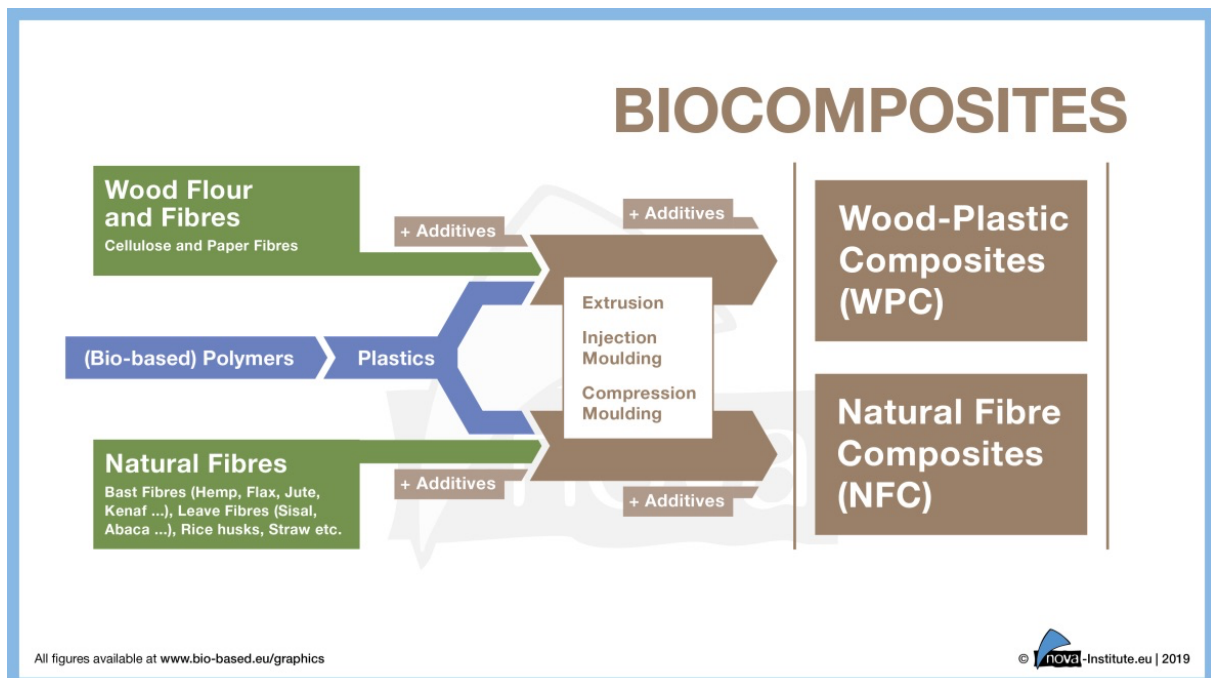


# The Biocomposite Recycling Industry Group (BRIG) First meeting

Minutes

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# 1 Participants

#	Organisation	Surname	Name	Position	Background	Expectation	Motivation
01	ABM Composite	Rosling	Ari	R&D Director			Recycling, end-of-life use, sustainability
02	ADAMANT COMPOSITES Ltd.	Vavouliotis	Antonios	Co-Founder Machinery, Space, Automotive	Experienced Managing Director of high-tech SME's with a demonstrated history of working in industrial R&D activities		Biocomposite eco systems
03	Amorim Cork Composites S.A.	Peixoto	Cláudia	Project manager – Innovation department	Materials engineer	Producers responsibility	Recycling from cork composites, new solutions (cork materials)
04	Amorim Cork Composites S.A	Reinas	Marta	Global Technical Manager	Chemical engineering	Learning more about recyclability of biocomposites	
05	Amorim Cork Composites S.A	Sandra	Fernandes	Sales			Recycling strategy
06	Automotive Performance Materials – APM	Bourgeois-Jacquet	Jean-Marie	Engineer, Business Development	Automotive materials engineer		Reducing the carbon footprint of recycling
07	Biofiber Tech Sweden AB	Hongsia-Karlsson	Li	Marketing	Marketing	More knowledge about bio composite materials	Branding of biocomposites
08	Biofibre GmbH	Glammert	Christoph				
09	Bloom Biorenewables Ltd	Buser	Remy	CEO	Biochemistry /Biorefinery		Designing easy to recycle biocomposites
10	CIDETEC Surface	Jubete	Elena	Head of polymer composites	Surface engineering		Research of easy recycling
11	DST Dräxlmaier Systemtechnik GmbH	Clausner	Ivonne	Materials & Processes		Discussions about biocomposites	
12	Elastopoli Oy	Ture	Timo	R&D			

#	Organisation	Surname	Name	Position	Background	Expectation	Motivation
13	Fraunhofer IFAM	Koscheck	Katharina	R&D		Network synergies	
14	Freudenberg Home and Cleaning Solutions	Heese	Cristiana	Senior R&D Manager Homecleaning Veleda	Product development	Alternatives for recycling, shift of materials into post-consumer recycling	New materials (from fossil to renewable materials)
15	Greenboats GmbH	Riesen	Paul	R&D Engineer	Ocean engineer	Finding practical solutions for theoretical concepts	Recycling with small volume
16	IKEA of Sweden	Markevicius	Gediminas	Materials and innovations, R&D			Circular materials
17	INRAE National Research Institute for Agriculture, Food and Environment	Beaugrand	Johnny	Research Director		Network expansion	Upcycling, issues that different industries face
18	KNN Cellulose BV	Loman	Edwin	Account manager		Developing recyclable composites	
19	KU Leuven	Lagrain	Bert	Research			
20	KU Leuven	Van Aelst	Joost	Innovation Manager			
21	LEPAMAP Group	Delgado-Aguilar	Marc	Spanish coordinator of NANOCELIA network	Chemical engineering	Contribute to different industries	
22	Lineo	Pierre	Floran	R&D Manager	Natural fibres, Automotive, Aerospace		Automotive materials
23	Linotech GmbH & Co.KG	Grashorn	Cord	CEO			
24	Onyriq	Luna	Joseba	Co-Founder and CTO	Polymer chemist	Recycling loop	Learn about the initiative
25	Puustelli Oy	Lonnqvist	Tony	Project manager	Marketing		Recycling of the materials
26	Sappi Biotech	Spence	Matt	Executive Vice President			

#	Organisation	Surname	Name	Position	Background	Expectation	Motivation
27	Sappi Europe	Scharloo	Iris	General Manager Symbio			Recycling
28	Soprema SA	Bedel	Laurent	Head of R&D department	Expert in materials science	Improve a way to recycle their products	Improve a way to recycle their products
29	Soprema SA	Sarbu	Alexandru	Materials Chemistry R&D Manager		Recycling of thermosets	Synergy for recycling materials
30	Stora Enso	Smyth	Matthew	Research & Sustainability Manager	Polymer/Plastics engineering	Taking action	
31	Sulapac Ltd	Pohjakallio	Maija	Sustainability Director	Physical chemistry and electro chemistry	Sectoral cooperation, boost policy framework	Industrial infrastructure
32	Trifilon	Dutton	Jeremiah	Co-Founder			We should address the fears from market side
33	Tecnar GmbH	Nägele	Helmut	CEO	Chemical engineer, bioplastic materials		Upcycling for recycling of biocomposites Communicating carbon footprint
34	Université de Bretagne Sud - LIMATB	Bourmaud	Alain	Research			
35	University of Girona	Bagudanch Frigolé	Isabel	Project manager Campus Compòsits	Lab for composites	Facilitating all stakeholders	Certified recyclability
36	University of Patras Greece	Kostopoulos	Vassilis	Professor	Mechanical engineering	Contribute in the field of bio composites, collect information for industrial partners	
37	University of Plymouth	Summerscales	John	Professor of Composites Engineering	Composites engineering	Bringing LCA to the field	Substituting materials

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#	Organisation	Surname	Name	Position	Background	Expectation	Motivation
37	Volvo Car Corporation	Andersson	Andreas	Sustainability			Renewable content of recycling/communication, company has targets to increase bio-based content

## 2 Background

An online meeting was initiated and organised by the nova-Institute on February 25th to discuss with different stakeholders from the biocomposite sector the framework, topics, and direction of a possible industry-group with the name “The Biocomposite Recycling Industry Group (BRIG)”. The following chapters will summarise the discussion and draw recommendations for the next steps.

## 3 Discussion

### 3.1 Why do we need BRIG?

- Because there are a lot of uncertainties of how the biocomposites can be recycled
- To show, that biocomposite recycling can be turned into a business
- To engage as a group for influence on politics
- To understand levels of recycling streams in different industries. Do we need separate recycling streams?
- To elaborate how composites can be recycled
- To improve the LCA of our materials. To improve reusability of biocomposites
- To track recycling routes. What happens with the biocomposites today?
- To elaborate ways to design materials that can be easily recycled
- To promote the possible solutions and case studies. Embrace more application sectors
- To elaborate ways for dismantling and disassembling biocomposites

### 3.2 What BRIG wants to be?

- A project for the beginning
- An industry recycling group with a price to enter the group
  - o A fee is ok, but it should be easy to enter for new participants. Personal supporters should also be possible. Manufacturers need to take the responsibility for the recycling

### 3.3 What BRIG wants to do?

- Start with a project on tracking the recycling streams and the regulative landscape. To start with an association might be too much of effort at first place. We could also try to get to the Renewable Carbon Initiative of nova as a sub group. nova could also organise workshops to specific areas
  - o To be part of something bigger would be a good idea
  - o A project is a great idea - Defining a collective goal
  - o Forming smaller projects. Running time ca. 6 months
- Have different work packages and themes, where the members can choose to work on
- Start first, do not think/wait about the legislation
- Include stakeholders from the waste management/recycling sector into the group. Different legislations in the different countries needs to be taken into account.
- Case studies for different recycling cases might be difficult because they should be generalised and represent the whole industry instead of only single applications. Recycling is not regulated at European level

### **3.4 Do we want to strive for EU-projects?**

- Work in the form of a European platform with EU funding European Technology platform or Interreg Europe would be a possibility for a topic on circularity of biocomposites
- A BBI-Project call where biocomposites can be tackled

### **3.5 How should the long-term and short-term goals be designed?**

- Raising awareness that biocomposites can be recycled and increasing cooperation within the value chain
- It should be sort of a case study/white paper that represents the whole industry, not only specific industries or materials
- Analysing the production chain
- Change the structure for the industries' benefit
- Find ways to recycle biocomposites

#### **3.5.1 Lobbying and communications**

- We need a white paper or a position paper for the industry
- Awareness raising that biocomposites are useful

#### **3.5.2 Testing in existing technology and infrastructures**

- Value chain picture should be shown
- Upcycling
- Current waste collection has a certain structure and we try to fit in. It is difficult to change it into something that works. The current structure might not be the right one"
- Structured waste collection adapted to the infrastructure "180 degrees thinking"
- Case studies with mechanical and chemical recycling

#### **3.5.3 Testing in emerging technology**

- Design a proof-of-concept

### **3.6 How should BRIG be coordinated? Who should lead BRIG as a third party? When and how is this entity selected?**

- Keeping things short and concise to make it easier for participants to enter

### **3.7 How contributions of the members can be made?**

- No detailed discussion on that topic

### **3.8 Discuss practicalities of forming such a group**



### 3.8.1 Price for membership

- a. Member type 1 – annual fee X
  - b. Member type 2 – annual fee Y
- Different kind of memberships should be possible for SMEs, big companies, and individuals

### 3.8.2 Steering and leadership

- We could also try to get to the Renewable Carbon Initiative of nova as a sub group. nova could also organise workshops to specific areas
  - o To be part of something bigger would be a good idea

### 3.8.3 Monthly meetings?

- No detailed discussion on that topic

## 3.9 Other/side notes: Who will get the minutes to read

- Should be publicly available in order to be inclusive for protentional new members

## 4 Summary and Recommendations

Different groups of the participants of this meeting or even others that want to join us could form together to make a multi-client project that can be led by nova-Institute and financed through the participants of the group. In this case this kind of project would be of short term such as half a year. The areas which need to be covered by the group are as follows:

- The recycling technology
- A communication/Lobbying (including simple education about biocomposites for the layman)
- The regulative landscape and policy frame

Also, product specific recycling scenarios in form of case studies were discussed as this could be led by technical partners or universities in the framework of EU projects. A current cooperation will possibility be a BBI call that will offer the possibility for the biocomposites recycling.

All this short-term multiclient projects and EU-funded project will help to establish a corporation within the biocomposite industry that can lead afterwards to a formation of a formal industry association.