

# MATCH

Building the European  
Materials Common House



## Focus on Circular Economy

How can we make our economy circular and resource efficient?

Currently, we are using more resources than our planet can produce in a given time. We need to reduce the amount of waste we generate and the amount of materials we extract.



12.4  
tonnes of materials per capita  
were extracted in the EU.

3.2  
tonnes of materials per capita  
were imported to the EU.

1.3  
tonnes of material per capita  
were exported from the EU.

Read more: [eea.europa.eu/themes/households](http://eea.europa.eu/themes/households) and [eea.europa.eu/themes/waste](http://eea.europa.eu/themes/waste)

## Materials and their importance in the Circular Economy

Already in 2004 Stefan Bösch, Armin Reller and Jens Soentgen published their story-of-stuff-approach. The authors show that the first foundations for today's Circular Economy were laid in chemistry in the second half of the twentieth century, with the production of new synthetic materials in unprecedented quantities. With this development away from the natural substances the by-production of contaminants also increased and their regulation became soon necessary. Science, the government and industry have developed a set of rules that has been made more and more rigorous by various major accidents in industry and by the emergence of environmental movements. REACH, the European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals which entered into force in 2007 and replaced the former legislative framework for chemicals in the EU, is the answer in view of the ecological and societal risks, which might be related with such substances.

[Read more](#)



### **Finland created world's first circular economy road map**

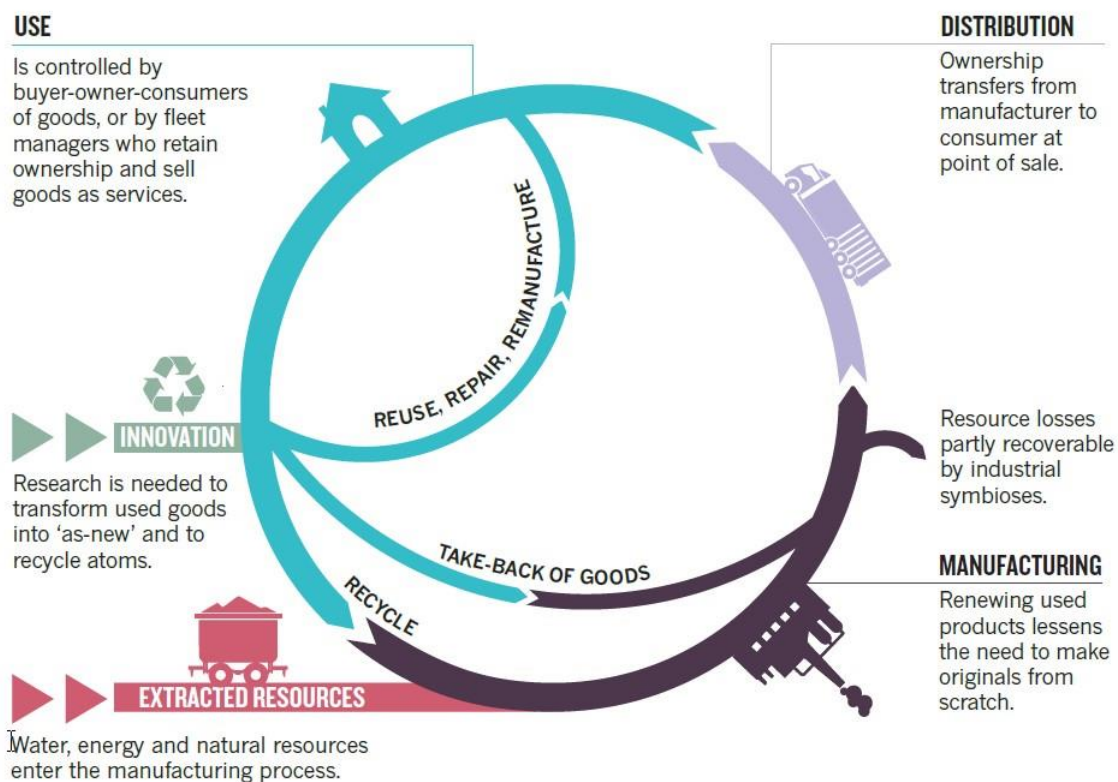
The world's first circular economy road map shows the way to sustainable success. Finland's national circular economy road map is beginning to create new solutions for Finland to offer a world challenged by climate change, dwindling natural resources and urbanisation. The first circular economy solutions are based on areas where Finland is traditionally strong, thus making it possible to offer tens of thousands of new jobs and generating billions of euros in added value each year. Finland has a real opportunity to create sustainable well-being and a successful carbon-neutral circular economy over the

next 5 to 10 years. It maximises the conservation of materials and their value in circulation for as long as possible which, in turn, keeps the volume of emissions they produce to a minimum. The road map shows how to make the transition to a circular economy.

[Read more](#)

## CLOSING LOOPS

Using resources for the longest time possible could cut some nations' emissions by up to 70%, increase their workforces by 4% and greatly lessen waste.



### Advanced Engineering Materials & Technologies for a Circular Economy

Global megatrends, including demographic and climate changes, urbanisation and the limits to resources and energy are the drivers of future change. The unprecedented trend of population growth in a resource constrained world increasingly forces business and policy makers to integrate sustainability considerations into their decision making. Non-energy and non-agricultural raw materials underpin the global economy and our quality of life. They are vital for the world's economy and for the development of environmentally friendly technologies such as renewable energy systems. Especially the EU is highly dependent on imports, and securing supplies has therefore become crucial.

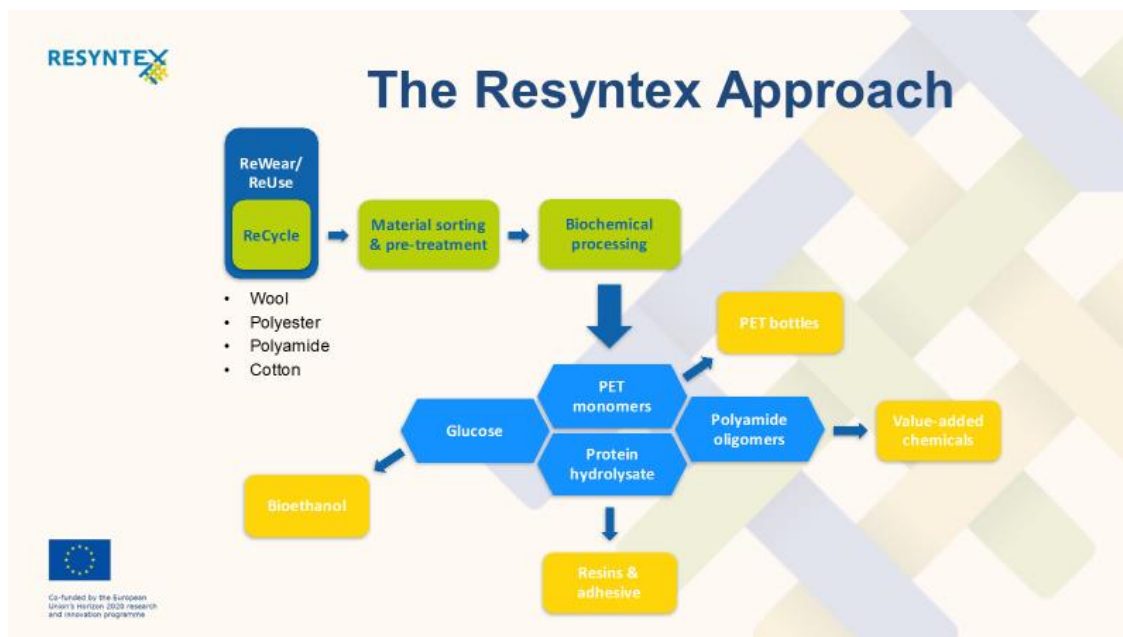
[Read more](#)



### **Jaguar Land Rover and Novelis Target Aluminum Waste as New Circular Resource Opportunity**

Over the past eight years, Jaguar Land Rover has taken lightweighting to new levels with its REALCAR (REcycled ALuminium CAR) project aimed at creating a closed-loop value chain to recycle vehicles. The first result of REALCAR was a new aluminum alloy grade (developed by Novelis and known as RC5754) made from automotive scrap metal. This alloy was used in the Jaguar XE – an advanced sports saloon featuring an aluminium-intensive body shell weighing in at just 251kg. Since the XE debuted, recycled aluminium has been introduced into Jaguar’s XF and F-PACE models.

[Read more](#)



### RESYNTEX: A New Circular Economy Concept for Textiles and Chemicals

RESYNTEX, a research project funded by the EU's HORIZON 2020 Programme, aims to create a new circular economy concept for the textile and chemical industries. Through an innovative recycling approach and industrial symbiosis, RESYNTEX, started in June 2015, will transform textile waste into secondary raw materials, creating circularity and reducing environmental impact. RESYNTEX has 20 project partners from across 10 different EU member states, including industrial associations, businesses, SMEs and research institutes.

[Read more](#)





*The MATCH Observatory is a key element on the WP4 of the MATCH project. Designed as a strategic surveillance tool, it's ultimate purpose is that MATCH partners, the European Commission and other users could be constantly aware about emerging and possibly disruptive trends in the field of materials.*



**Lightweight is the focus of Swedish new research projects**

Nov 18, 2016 | [Transport](#)

The ability to reduce component weight is a significant and recurring theme in Swerea SWECAST's research. Two new projects will now study how lightweight solutions can be produced by joining materials and casting thin-walled goods. FACTS – TINA The project is a... [read more](#)



**DSM Dyneema showcases latest Dyneema Anti Stab Technology**

Nov 17, 2016 | [Creative Industries](#)

DSM Dyneema is showcasing its recently launched Dyneema® Anti Stab Technology [read more](#)

Follow Us: RSS Feeds

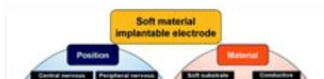
-  [Construction \(72\)](#)
-  [Creative Industries \(65\)](#)
-  [Energy \(72\)](#)
-  [Health \(78\)](#)
-  [Transport \(83\)](#)

Follow Us



Search entries by

**Keywords**   
**Category**   
**Tags**



Tags

- [3D printing](#)
[Aerogel](#)
[Aerospace](#)

**MATCH Observatory, technology and market watch for the materials community in Construction, Creatives Industries, Energy, Health and Transport sectors**

The Match Observatory is a strategic vigilance system aimed at identifying and following the adoption by market of the key research and technology developments in materials required to meet the challenges of the 21st century across major industrial sectors. For this we will follow the evolution of market drivers, market value of the innovations and signals of real market acceptance of the innovations, this is basically TRL7, 8 and 9.

[Read more](#)



**EuroNanoForum**  
2017

**EuroNanoForum 2017**  
**June 21-23, 2017, Malta**

The EuroNanoForum 2017 conference (ENF 2017) will take place on 21-23 June 2017 in Malta under the auspices of the Maltese presidency of the European Union. It is organised in cooperation with the European Commission's Directorate-General for Research and Innovation.

European competitiveness and jobs depend on strengthening European manufacturing capabilities by providing essential technology building blocks in the form of high value-added products and their manufacturing processes in strategic European value chains. The aim of the conference is to contribute to these efforts of strengthening European competitiveness and supporting the renewal of its manufacturing industries, by the aid of nano- and microtechnologies and advanced materials.

ENF2017 will review the status of European technology development in nanotechnology and advanced materials industries, discussing the latest progress in nanoscience and nanotechnology, and their contribution to innovation in manufacturing across all industrial sectors.

[Read more](#)

**Editorial board members**



[Read more on Newsletter Editorial Board](#)

The MATCH project was initiated to strengthen and deepen the Alliance4Materials strategy with a further increased stakeholder network. The project is coordinated by Italian Centro Sviluppo Materiali and the whole consortium consists of 18 partners from nine countries representing the six related European Technology Platforms and several major European material research organisations.

The project started in January 2015 and will continue for 30 months until June 2017. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 646031. [Read more](#)