

BBI INFODAY CROATIA

Best practice, Mi-Plast d.o.o.

Filip Miketa, R&D director, Mi-Plast ltd.

Zagreb, March 16th, 2017

Content of the presentation

About the company

R&D EU projects -
our experience

Our advice

About the company - history in brief

- ▶ Established in Banja Luka (BiH) in 1980
- ▶ Due to the war in 1990s, the company stopped with production for 3 years and it was again re-established in 1993 in Rijeka, Croatia
- ▶ **Core business:** Mi-Plast d.o.o. manufactures and recycles plastics and plastic flexible film products
- ▶ In 2012 we started internationalisation of our business by participating in EU Framework Programmes for R&D (FP7 programme)
- ▶ In the meanwhile we have become a regional leader in number of participations in Horizon 2020 programme in frame of bioeconomy and circular economy
- ▶ We are now a leading industrial manufacturers and recyclers and R&D performing SME company
- ▶ And the most successful SME (and industry representative) in Horizon 2020 in Croatia

About the company - vision for the future

▶ Our strengths:

- ▶ Young R&D department
- ▶ 37 years of industrial experience
- ▶ EU project experience

▶ Our vision:

- ▶ Direct all of our activities at achieving full bioeconomy potential and thus becoming a regional leader
- ▶ Complement already existing recycling streams with bio industry and biomaterials in order to achieve full impacts of circular economy
- ▶ Together with our partners continue working on new **packaging solutions** with advanced and/or tuned properties that are environment friendly (our work is based on 94/62/EC Directive on packaging and packaging waste and its Amendment 720/2015)
- ▶ Bringing 1st biorefinery in East and SE Europe

R&D EU projects - our experience



EU R&D projects - timeline

2013. FP7 project - BIO-QED

2014. Mi-Plast is a full member of BIC

2015. H2020 Hyperbiocoact, H2020 Pulpaktion, H2020 Funguschain

2016. H2020 Res Urbis, LIFE+ Ecomethylal

2017. 3H2020 (under GA&CA preparation), ESIF- under preparation

R&D projects - What we do in our projects

Activities and processes which we are implementing are at different TRL 3-9:

Blown extrusion

Cast extrusion

Co-extrusion & mono-extrusion

Re-granulation i.e regeneration

Compounding

Welding/sealing

Printing, coating and lamination etc.

LCA

Evaluation and characterization of obtained materials

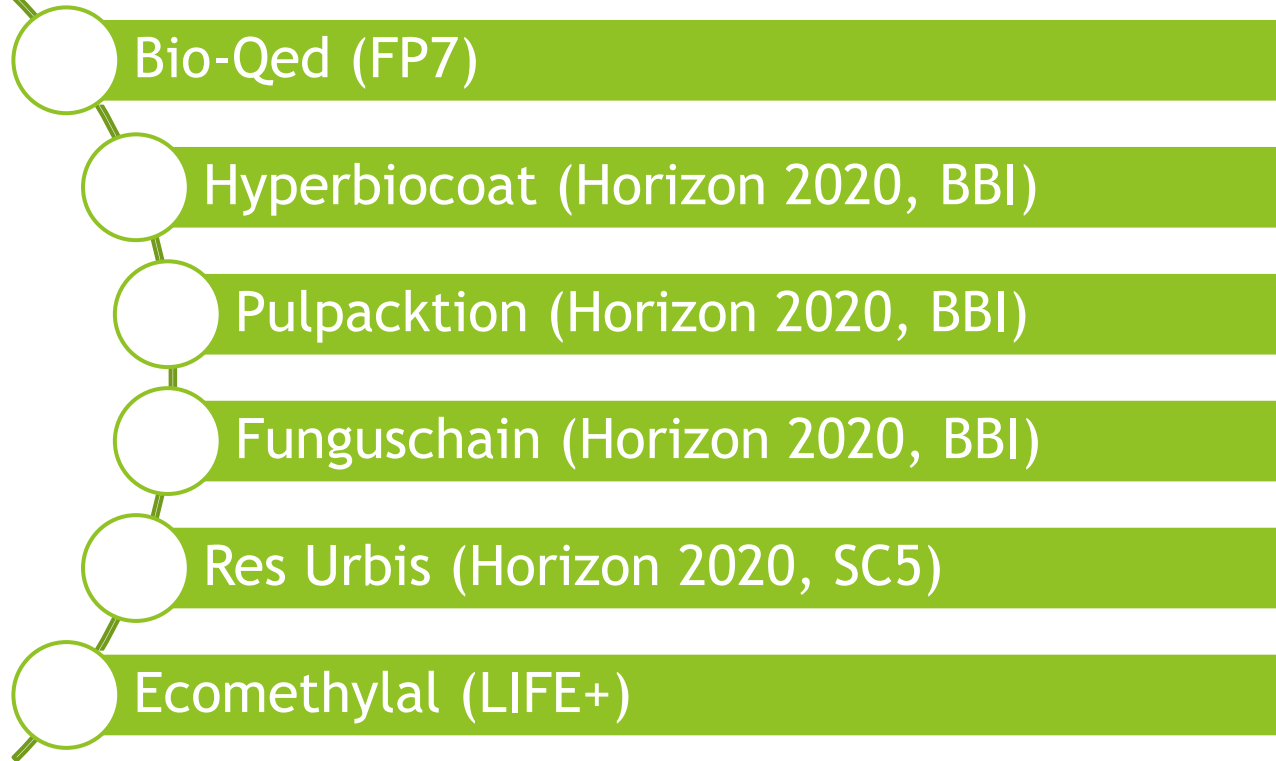
Project management and dissemination activities

EU R&D projects - what've gained so far

- ▶ Strong connection with Large Industries, SMEs, RTOs and Universities across EU and non-EU, Eastern European partners and other BIC full and associate members
- ▶ Partnerships with strong industrial leaders such as: Novamont, Cargill, Roquete, Sappi, StoraEnso, Metsa group, UPM, Novozymes, Total, Corbion Purac, Unilever, BASF, Avantium, Energochemica, Biochemtex, Versalis, Ferrero etc.
- ▶ BIC members recognized our potential and critical mass of ideas based on strong dedication to bioeconomy sector and networking that could bring more benefits if we take into consideration 3 impacts:
 - ▶ enviromental impact
 - ▶ social impact
 - ▶ economical impact

EU R&D projects - our projects

- ▶ In the frame of EU programmes Mi-Plast participates in **6 ongoing projects**



- ▶ **3 Horizon 2020** projects are under GA preparation (CIRC-01, 2 BBI 2016); **1 ESIF** project

EU R&D projects - our projects

PROJECT	CONSORTIUM	TYPE OF ACTION	START/END YEAR
Bio-Qed (FP7) KBBE	Novamont(ITA) , Germany, Belgium, Netherlands, Croatia, Spain, USA	Large scale demonstration for the bio-based bulk chemicals 1,4 butanediol and itaconic acid aiming at cost reduction and improved sustainability	2014-2017
Hyperbiocoat (H2020)	Fraunhofer IWKS+ISC(GER) , Greece, Italy, SUI, Austria, Croatia, Spain, Poland	RIA High performance biomass extracted functional hybrid polymer coatings for food, cosmetic and medical device packaging	2016-2019
Pulpacktion (H2020)	Rottneros Packaging(SWE) , Italy, Croatia, Germany, Spain, Netherlands, Norway	DEMO Optimised moulded pulp for renewable packaging solutions	2016-2020

EU R&D projects - our projects

PROJECT	CONSORTIUM	TYPE OF ACTION	START/END YEAR
Funguschain (H2020)	BioDetectionSystem (NED), Spain, Croatia, Ireland, Portugal, Germany, Sweden, Belgium, UK	DEMO Valorisation of mushroom agrowastes to obtain high value products	2016-2020
Res Urbis (H2020)	UNIROMA (ITA), Portugal, Spain, UK, France, Croatia, SUI, Denmark	RIA REsources from URban Blo-waSte	2017-2020
Ecomethylal (LIFE+)	Aimplas(SPA) and Croatia	DEMO High quality methylal from non-recyclable plastic waste by an improved Catalytic Hydro-Gasification Plasma (CHGP) process.	2016-2019

EU R&D projects - our projects

- ▶ All of our EU projects are funded from different EU platforms for R&D&I (Horizon 2020, FP7, Life+ and ESIF) and so far we will receive 5 Mil/E of grant
- ▶ Benefits:
 - ▶ Internationalisation of our business
 - ▶ Confirmation of excellence and competitiveness
 - ▶ A chance to work with some of the best and well known RTOs in EU as well as large Industries
 - ▶ An opportunity to share expertise and knowledge in placing products on the market
 - ▶ An opportunity for us to implement new technologies and processes which are then used for obtaining new products with high value
 - ▶ Building Mi-Plast portfolio of IP (patents, industrial secrets and know-how) with estimation of 15 patents
 - ▶ Easier placement of our bio based products on domestic and EU market

ADVICE

Our advice - possibilities

- ▶ **Possibilities for Croatia and the region as we see it:**
 - ▶ Re-building of industry infrastructure in line with circular economy demands
 - ▶ We should build up and use our traditionally strong chemistry sector which is in some way a branch of biotechnology
 - ▶ Marginalised and unused land represents a huge advantage, but at the same time we lack clear policy and reforms in that area
 - ▶ Use feedstock that is available to us, such as OFMSW (Organic Fraction Municipal Solid Waste); wood waste i.e lignocellulosic feedstock; crop wastes; residues from the food chain sector (up to 50% of world food in the whole chain end up in waste); waste water and sludge, marine biomass in general
 - ▶ Possibility of synergies between ESIF and Horizon 2020

Our advice - benefits of joining BIC

- ▶ In order to network you have to **be present** at important bioeconomy events (international conferences, meetings of BIC (if member), information days, etc.)
- ▶ Invest in **internationalization** of your business!
- ▶ As a member of BIC you have a right to be present at PWG (Programming Working Group), Core groups and GA meetings, where you have a chance to create ideas for calls and to create future EU bioeconomy policy
- ▶ As an associate member you have a chance to get the best possible networking and meet "big bioeconomy players" and companies via **face2face meetings**
- ▶ **Take** the opportunity to participate in consortia!

Kontaktirajte nas

► **Mi-Plast d.o.o**

► Filip Miketa- voditelj istraživanja i razvoja

filip.miketa@mi-plast.eu

mi-plast@mi-plast.eu

projects@mi-plast.eu

Tel.: +385 51 343330, +385 51 301005

Tel/fax: +385 51 343330

Milutina Barača 54 51000

Rijeka

Hrvatska (Croatia)

Hvala na pažnji!

