



REPUBLIKA HRVATSKA

Ministarstvo zaštite okoliša i energetike



# Poveznica znanstvenog i privatnog sektora u razvoju i provedbi inovativnih rješenja u području okoliša i klime

## Program LIFE

20.10.2016., Zagreb  
Ministarstvo zaštite okoliša i energetike

# SADRŽAJ

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- PROGRAM LIFE
- PROJEKTI i PRAKSA
- PREDNOSTI PROGRAMA LIFE

# Program LIFE



# Program LIFE

- Program EU za financiranje projekata iz područja zaštite okoliša i klimatskih aktivnosti.

Potprogrami	Prioritetna područja
Okoliš	Okoliš i učinkovitost resursa
	Priroda i bioraznolikost
	Upravljanje okolišem i informacije
Klimatske aktivnosti	Ublažavanje klimatskih promjena
	Prilagodba klimatskim promjenama
	Upravljanje i informacije na području klime

# Tipični projekti u programu LIFE

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- **Trajanje LIFE projekata :** 2-5 godina
  - Nije strogo definirano trajanje projekata
- **Optimalni budžet:** 500 000€ - 4 000 000€
  - Može biti više ili manje
- **Broj partnera nije ograničen**

# Tipični projekti u programu LIFE

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- **Fokus** je na provedbi novo razvijenih metoda/testiranja/tehnika/itd.
- Projekti se **ne bi trebali** bazirati samo na velikim infrastrukturama ili znanstvenom istraživanju
- **LIFE baza projekata:**  
<http://ec.europa.eu/environment/life/project/Projects/index.cfm>

# PROJEKTI i PRAKSA

## Primjer 1

From Production to Recycling, a circular economy for the European Gypsum Industry with the demolition and recycling

- **Cilj:** Povećati postotak recikliranog industrijskog otpada gipsa te tako pomoći ostvarenju resursno učinkovite ekonomije

# PROJEKTI i PRAKSA

- **Trajanje projekta:** 01.01.2013.-01.01.2016.
- **Ukupan budžet:** 3,566,250.00 €
- **EU kontribucija:** 1,783,123.00 €
- **Koordinatora korisnik:** EUROGYPSUM – europsko udruženje proizvođača gipsa, Belgija
- **Partner korisnik:** 17 partnera
  - Građevinske tvrtke
  - Fakulteti
  - Tvrte za recikliranje
  - Tvrte za proizvodnju gipsa
  - Konzalting agencija

# PROJEKTI i PRAKSA



# PROJEKTI i PRAKSA



GYPSUM TO GYPSUM

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- [GTOG](#)
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- [TEAM](#)
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## GTOG PROJECT

### Gypsum is indefinitely recyclable

Gypsum products can be counted amongst the very few construction materials where “**closed-loop recycling**” is possible, i.e. where the waste is used to make the same product again. Gypsum as such is 100% and eternally recyclable. You can always reuse Gypsum because the chemical composition of the raw material in plasterboards and blocks always remains the same. Gypsum is definitely a construction material with multiple environmental benefits!

#### Project Overall Objective

The main objective of the **GTOG project** is to change the way gypsum based waste are treated. Despite the fact that a closed loop is possible, the reality is different. The GtoG project aims at **transforming the European gypsum demolition waste market** to achieve higher recycling rates of gypsum waste, thereby helping to achieve a resource efficient economy. Close loop recycling for gypsum products will only happen if:

- Dismantling practices are applied systematically (as a standard) instead of demolishing buildings;
- Sorting of waste is preferably done at source, avoiding mixed waste and contamination;
- Recycled gypsum will meet stringent specifications in order to be re-incorporated in the manufacturing process;

The Project wish to turn waste **into a resource** for close loop recycling in accordance to the criteria set in Article 6 of the **Waste Framework Directive**. Therefore, **GTOG** innovative concept includes **an integration of the supply chain to achieve higher recycling rates of gypsum waste**.





# PROJEKTI i PRAKSA

## Primjer 2

### PLA4COFFEE

- **Cilj:** upotreba biorazgradive sirovine u proizvodnji kapsula za kavu
  - Prikaz inovativnosti u industriji = novi proizvodi koji smanjuju utjecaj na okoliš, a pri tome ne utječu na ekonomiju

**PLA4COFFEE**  
LIFE14 ENV/IT/000744



# PROJEKTI i PRAKSA

- **Trajanje projekta:** 16.7.2015. – 15.01.2018.
- **Ukupan budžet:** 2,502,695.00 €
- **EU kontribucija:** 1,501,610.00 €
- **Koordinatora korisnik:** Aroma System S.r.l., Italija (tvrtka)
- **Partner korisnik:**
  - API Plastic (tvrtka),
  - Institute for Polymers, Composites and Biomaterials (IPCB-CNR)
  - University of Rome Tor Vergata

# PROJEKTI i PRAKSA

## THE PROJECT

LIFE-PLA4COFFEE project n. ENV/IT/000744 will validate the use on industrial level of new polymer formulations with improved functional properties and based on commercial poly(lactic acid) (PLA) grades primarily for the production of compostable coffee capsules but also for the production of other consumer goods.

At this regard, the project involves three stages:

Phase 1 – Scale-up of the new PLA material and the coffee production process by the refinement of the selected PLA formulation and a specific development of the pre-industrial compounding plant. Iterative tests and optimization will allow to fine-tune the process.

Phase 2 – Demonstration of the new material and the adapted process by testing prototypes to demonstrate how the new PLA based material contributes to the production of environmental-friendly items while respecting required specifications. At this regard, life cycle and socioeconomic impact assessment will support the results.

Phase 3 – Dissemination of project results through the website, participation in relevant events such as fairs, workshops, international conferences as well as publications on international refereed journals and specific trade magazines.

### MAIN AIMS OF THE PROJECT

The project, with the contribution of the LIFE Programme of the European Union, will be mainly aimed to:

- Convincing coffee capsules producers that the use of new bio-based materials can meet the specifications required by the reference market;

Demonstrating how an industrial innovation can ensure new productions with reduced environmental impact while safeguarding economic growth.

### EXPECTED RESULTS

The technical results, expected within the two years of the project, can be summarized as follow:

- A fine-tuned PLA formulation able to meet processing conditions and performance criteria;

# PROJEKTI i PRAKSA

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- Prilagodba PLA materijala u proizvodnji kapsula
- Izrada prototip biorazgradivih kapsula
- Smanjiti količine otpada
- Upotreba otpadnih biorazgradivih kapsula kao kompost

# PROJEKTI i PRAKSA

## Primjer 3

LIFE+ WOGAnMBR - Demonstration of Anaerobic Membrane Bioreactor technology for valorization of agro-food industry wastewater

- **Cilj:** prikaz tehničke, ekonomске i okolišne izvedivosti inovativnog AnMBR bioreaktora s minimalnom proizvodnjom mulja i maksimalnom energetskom učinkovitošću

# PROJEKTI i PRAKSA

- **Trajanje projekta:** 01.07.2014. do 30.06.2017.
- **Ukupan budžet:** 1,232,647.00 €
- **EU kontribucija:** 616,323.00 €
- **Koordinatora korisnik:** University of Burgos, Španjolska
- **Partner korisnik:**
  - CETqua's (tehnološki centar)
  - Eurofrits (tvrtka)
  - The Spanish Federation of Industries Food and Beverages (javno tijelo)
  - PepsiCo (tvrtka)

# PROJEKTI i PRAKSA



**Desarrollo y demostración de la tecnología AnMBR para el tratamiento y valorización de aguas residuales complejas de industrias agroalimentarias.**

**Demonstration of Anaerobic Membrane Bioreactor technology for valorization of agro-food industry wastewater.**

La tecnología de los reactores biológicos de membrana anaerobios (AnMBR) combina el proceso biológico por el que microorganismos anaerobios digieren contaminantes orgánicos, con el proceso físico de filtración a través de los poros microscópicos de una membrana que separa los microorganismos del agua tratada, mejorando sus cualidades por ultrafiltración. El biogás producido en la digestión biológica anaerobia puede ser utilizado en la propia industria para reducir su huella de carbono.

**Objetivo**  
El objetivo de este proyecto es desarrollar la tecnología AnMBR para el tratamiento sostenible de aguas residuales con aceites y grasas del sector agroalimentario, sometidas generalmente a procesos de desengrasado que generan grandes cantidades de fango, en condiciones económica y técnicamente viables para las industrias agroalimentarias.

**Imagen ilustrativa del proceso:**



**Partners**

- FIAB ALIMENTAMOS EL FUTURO
- CETAJUA CENTRO TECNOLÓGICO DEL AGUA
- UNIVERSIDAD DE BURGOS
- Eurofrits
- PEPSICO
- AQUALOGY Where Water Lives

**Stakeholder**

**Duración del proyecto**  
01/07/2014 - 30/06/2017

**Presupuesto**  
1,232,647 €

**www.life-woganmbr.eu**  
**info-woganmbr@ub.edu**

Tweets to @WOGAnMBR

Con la contribución del instrumento financiero LIFE de la Unión Europea



LIFE 13 ENV/ES/000779

# PROJEKTI i PRAKSA

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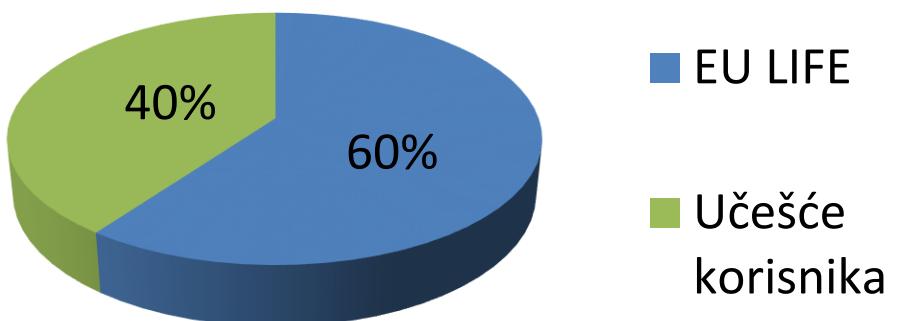
- Konstrukcija pilot AnMBR postrojenja obrade otpadnih voda (>1m<sup>3</sup> po danu)
- Obrada otpadnih voda koje sadrže masti i ulja
- Smanjena proizvodnja mulja za 90%
- 100% upotreba otpadnih ulja i masti u proizvodnji bioplina

# Put do LIFE projekta

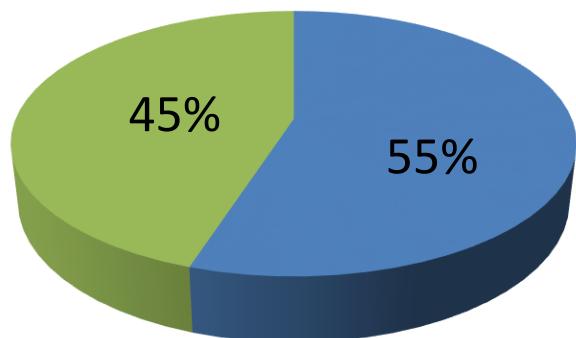
- Natječaj se otvara jednom godišnje
  - Sredinom svibnja
- Prijava direktno EK
  - Putem eProposal internetskog alata
- Slijediti smjernice za prijavitelje
  - Konzultirati se s Nacionalnom kontakt točkom

# Stope sufincanciranja

Za programsko razdoblje 2014.  
- 2017.



Za programsko razdoblje  
2018. - 2020.



# Prednosti programa LIFE

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- Prijaviti LIFE projekt mogu **sve pravne osobe** registrirane u EU
- Sloboda u izboru teme
- **Platforma** za razvoj i razmjenu najbolje prakse i znanja

# Prednosti programa LIFE

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- Pokriva **rizik** u provedbi novog rješenja
- Umrežavanje **različitih sektora i područja**
- Širenje na **međunarodnom tržištu**

# LIFE tim Hrvatska

- Organiziramo radionice za pripremu projektnih prijava
- Savjetujemo potencijalne prijavitelje
- Dostupni su prijevodi smjernica za prijavitelje



**Kontaktirajte nas na [life@mzoip.hr](mailto:life@mzoip.hr)**



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**Hvala na pažnji!  
Pitanja?**