

International Brokerage Event
Brussels, 26-27/10/2017



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Energy Institute Hrvoje Požar – EIHP

Zagreb, Croatia



- Est. 1991, 86 employees ☺ ☺ ☺ ~80 % with BSc and beyond
- Research institute with market orientation
- 70% of income generated at external markets
- (some of) Clients: EBRD, EC, Energy Community; EuropAid; FAO; GEF; GGF; IAEA; IEA Bioenergy, UNDP, UNIDO; USAid; WB...



Mission:

developing modern, resilient, secure, sustainable energy systems including both (non)conventional energy sources by energy planning, balancing, integration by developing new energy and business models, innovative approach to each topic

- Participation in >70 EU projects with different sources of funding (IEE, Horizon 2020, IPA, Interreg, IPA-Med, FP7; LIFE...)
- Among top national beneficiaries from H2020 so far...



Bioenergy at open market=bioeconomy



- Dept RES, EE & EP (1/6) steps out to bioeconomy to find options for bioenergy projects in a competitive environment and discovers innovative value chains...
- Our team = 25 experts 😊😊😊: energy, civil engineering, environmental protection, agroecology, architecture, chemical engineering
- Goals:
 - finding innovative value chains to support economics of bioenergy production
 - Turning liabilities of a bioenergy plant to assets (wood ash, digestate, CO₂, S, „waste” heat, sewage sludge...)
 - Integration of biomass production in existing landscape use and management to reduce the costs by engaging ecosystem services
- Currently 10 ongoing H2020: biogas, biomass, energy efficiency, transport...

SC5-09-2018-2019: New solutions for the sustainable production of raw materials

Mining WWTP sewage sludge for raw materials



a) Breakthrough concepts and solutions for sustainable exploration, mining and/or processing

- Objectives:
 - to turn sewage sludge in a continuous source of raw materials, including metals,
 - to develop innovative value chain with most added value product within the agglomeration (urban area)
 - to reduce energy intensity of WWTP
- Expected results
 - Recovered CRM - P
 - Substitute aggregates (raw materials) in construction
 - Reduced price of purified water
 - Improved health and safety of local population
 - Gained trust of society in clean and safe production of raw materials in vicinity of a city

Consortium - profile of known partners



No	Partner Name	Type	Country	Role in the Project
01	Energy Institute Hrvoje Požar	RTD	HR	energy aspects, validation of innovative value chains
02	Faculty of Chemical Engineering and Technology	RTD	HR	„Mining” methodology, validation of product features
03	Croatian groupation of water and sewage utilities	IND	HR	Verifying application of the research
04				

Consortium - required partners



No	Expertise	Type	Country	Role in the project
01	Civil engineering	RTD		Development of new product
02	Modular construction industry representative	SME/IND		development of new product
03	WWTP	IND		State-of-the-art, sludge provider
04	City planning office	GOV		Plausible integration of new economy into city maintenance and planning
05	LCA			Ensuring improvement of health and safety performance
06	Water Supply and Sanitation Technology Platform	IND	BE	research and development guideline; state-of-the-art
07				

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