

# Call for new RIS Task Partner in PHEIDIAS project

1. Project information			
Project name:	PHEIDIAS		
Lead Partner:	MONOLITHOS Catalysts & Recycling Ltd.		
RIS Task Partner Patron:	MONOLITHOS Catalysts & Recycling Ltd.		

### 2. Project description

PHEIDIAS aims to bring into the market an innovative hydrometallurgical process for the recovery of Platinum Group Metals (PGMs) from Spent Vehicle Catalytic Converters (SVCCs). The competitive advantage of this technology is the increased material recovery rate, as well as significantly lower operational costs. The rates of Platinum, Palladium, and Rhodium recovery with this technology have already reached ~98%, ~98%, and ~60%, respectively, with highly increased operating flexibility and cost efficiency. Every time a batch of SVCCs becomes available, initiating the process requires much less energy than the pyrometallurgical processes mostly employed in the RIS region (test units operate at 70°C than ~1200°C of competitive solutions). Further to this, the technology uses solvents in low concentrations, which improves waste management performance.

The project will focus on the markets of Greece, Poland, Hungary, Bulgaria, Slovakia, Slovenia, Romania, Cyprus, and Serbia, where project partners have already developed a network of SVCCs suppliers through their previous collaboration in the INNOCAT and INNOCAT-up projects. To that end, partners will upscale and pilot-test the proposed technology at large-scale operation conditions, bringing it from TR5 to TRL8 during the project, and commercialise it within one year after project completion (TRL9).

PHEIDIAS foresees revenues from both selling the PGMs recovered, for which demand is both at an all-time high in 2020 and still increasing, as well as from selling access to the technology and know-how through licensing. To that end, the partnership will also develop a Go-To-Market strategy and establish commercial networks and collaborations in the aforementioned markets, primarily with the car maintenance and recycling industry, and further explore possibilities for EU-wide expansion (a Spanish partner has been included in the consortium for this reason).

### 3. Expected role of RIS Task Partner

The selected RIS Task Partner will contribute to the PHEIDIAS project by providing access to recycling facilities and spent vehicle catalytic converters (SVCC) in Slovenia. Additionally, the RIS Task Partner will be engaged mainly with the activities of WP3 and is expected to contribute to other Work Packages of PHEIDIAS as follows:

WPO: RIS Task Partner will contribute to T0.3 by giving feedback in the Risk Analysis reports





required for the implementation of the task, taken into account the market conditions in Slovenia.

WP1: Provision of input to the Work Package leader (Monolithos) regarding own administrative and financial management of the project for the performance and financial reports, provision of input for the semi-annual quality reports and participation in the project meetings.

WP2: Contribution in the dissemination activities by participating in events organized by 3<sup>rd</sup> parties with the scope to promote PHEIDIAS objectives and progress.

WP3: RIS Task Partner will assist in the collection of spent vehicle catalytic converters recycling facilities in Slovenia; the cost for the SVCC purchase will be covered by MONOLITHOS.

WP7: Contribution in the activities of T7.2, in which RIS Task Partner shall identify and attract recycling facilities and SVCC suppliers, from Slovenia, to the PHEIDIAS network.

## 4. Conditions for financial support

Maximum amount of financial support

The selected RIS Task Partner will receive their funding via the Task Partner Patron, which is Monolithos Ltd. Funding for this RIS Task Partner will not exceed the annual amounts defined in the following table:

RIS TASK PARTNER FUNDING:							
YEAR	2021	2022	2023	2024	2025	TOTAL	
Funding (in EUR)	22,394 €	14,828€	-	-	-	37,222€	



Criteria for calculating the exact amount of financial support

Financial support to the selected RIS Task Partner will be categorized under Article 13 of the SGA, "Subgranting" and will be reported based on actual costs incurred among the below categories:

Cost category	Description	Evidence*	
Direct Personnel	Actual personnel costs	Time sheets	
Travel and subsistence	Travel, accommodation	Travel & Expense policy	
	costs and applicable per	Receipts	
	diem in accordance with		
	usual accounting principles		
	of the RIS Task Partner		
	related to participation in		
	project related activities		
Other direct costs	Other costs incurred in	Receipts	
	relation to Task Partner		
	activities in the Project		
Indirect costs	25% of all direct costs	N/A	
	above mentioned		

<sup>\*</sup>Further details can be found here:

http://ec.europa.eu/research/participants/data/ref/h2020/grants\_manual/amga/h2020-amga\_en.pdf

Categories of persons / organisations that may receive financial support

- Territorial public authority or regional development agency
- University with academics and/or research in the field of raw materials
- Research Institute / Organization active in the field of raw materials
- Industry representative / company in the field of raw materials
- Association / Chamber related to raw materials sector
- Other stakeholder contributing to raw materials sector.



### 5. Selection criteria and selection process

At the time of selecting a RIS Task Partner, the following criteria will be considered:

- A. Task Partner comes from RIS eligible country<sup>1</sup>.
- B. Task Partner is able to contribute to and maximize the impact of PHEIDIAS.
- C. The selected candidate shall provide the expertise in the raw materials sector as follows:
  - Provide access to local recycling facilities and SVCCs in Slovenia, contribute in regional promotion of the project and in the development of a regional commercialization strategy;
  - Expertise in the fields of (i) waste management, (ii) integrated management of waste generated in the region, (iii) circular and collaborative economy of the country and (iv) processing and reuse of materials, energy, and aquatic waste sources, waste recovery into the market and sustainable development.
  - Being able to organize professional events, lectures and seminars, support entrepreneurial activities, and promote the needs of business entities based in the region in national and international organisations and bodies.
- D. Main activity related to the project is performed in the specific RIS country where the Task Partner originates from.
- E. RIS Task Partner is coming from the Knowledge Triangle and/or strengthening the Knowledge Triangle Integration approach of EIT RawMaterials. In particular, the Task Partner should be one of the following:
  - University with academics and/or research in the field of raw materials
  - Research Institute / Organization active in the field of raw materials
  - Industry representative / company active in the field of raw materials
  - Association / Chamber related to raw materials sector
  - Other stakeholder contributing to the raw materials sector.

EU Member States: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, Romania

H2020 Associated Countries in Europe: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Republic of North Macedonia, Georgia, Moldova, Montenegro, Serbia, Turkey, Ukraine



 $<sup>^{\</sup>rm 1}$  Countries eligible to take part in the EIT RIS are:



#### Selection process

In case there are several organisations or persons that qualify for the Tasks to be implemented, the selection will be based on the following:

- For each Type of Activity, a rating between 1 (poorly meeting the criteria) and 3 (criteria met by 100%) will be given;
- Based on the sum of the individual ratings a ranking of organisations will be established;
- The partner ranked 1<sup>st</sup> will be approached to join the consortium; in case this potential partner refuses to join the consortium, the 2<sup>nd</sup> ranked potential partner will be contacted etc.

## 6. Submission of application / contact details for more information

All applications must be submitted using the Application Form available here: PHEIDIAS Application Form.docx

The application must be submitted to yakoumis@monolithos-catalysts.gr by 31/08/2021 at 12:00 CET.

In case of questions please contact: lakovos Yakoumis +30 210 64 50 106, +30 210 64 50 266 yakoumis@monolithos-catalysts.gr