

European Institute of Innovation & Technology



# **Community** good practices in Education

Case studies from: EIT RawMaterials 2023





### EIT RawMaterials

The Master Programme Advanced Materials: Innovative Recycling (AMIR) was created to meet Europe's dire need for secondary raw material supply for its industry. That industry critically needs to move in direction of reduced waste, greater resource efficiency, and lower greenhouse gas emissions. AMIR meets those needs by creating new talent in advanced materials recycling and circular economy. The two-year curriculum incorporates entrepreneurship skills to give learners the ability to take the initia-tive themselves to develop sustainable ways to use and reuse materials throughout the entire raw material value chain. This holistic focus makes AMIR unique compared to competing programmes in this domain.

AMIR's added value lies in combining disciplines and building networks of partners in raw materials and recycling. It has become one of the European Commission's Top 10 Unique Study Programmes.

## Graduates go out into the world with knowledge in:

- Recycling technologies
- Materials science and engineering
- Mining and raw materials exploration
- Leadership and entrepreneurial skills
- Conducting resource life cycle and sustainability assessments
- Intellectual Property (IP) and Technology Intelligence (TI)



#### Two Years of Hands-On Experience in Academia and the Industry

Going through the AMIR programme means getting a combination of four experiences:

 Higher education courses with the possibility of achieving a diploma from two EIT-partner Universities

- A six-month internship with a research organisation, industrial partner, or academic partner
- Partaking in the AMIR Summer School

• Partaking in EIT RawMaterials activities such as EIT Jumpstarter or Lab2Market which are designed to boost learner entrepreneurial skills and potentially launch their businesses

#### AMIR is Financially Sustainable

The programme has excelled at attracting additional funding from European and national sources without falling under double financing. AMIR has been able to introduce a strategy for diversifying revenues and from 2022 onwards has successfully become an Erasmus Mundus Joint Master programme, which allowed them to double the number of students enrolled in the programme.

#### Graduates are Overwhelmingly Joining the Sector Professionally

Data shows that the programme is meetings its main goal: to provide the market with highly skilled professionals with good market and industry knowledge. AMIR estimates that 95% of the participants areemployed within 6 months of completing the programme; and 90% are working in the raw materials sector. Between 2019-2022, 44.1% of the graduates describe their field of activity as innovation in materials, and 41.2% as recycling and sustainability. Most (85%) of the same graduates rated their satisfaction with the programme highly or very highly (with an average score of 4.26 on a 5-degree scale). 94.1% of students felt that completing the programme had a positive impact on their careers. It has also helped with reducing the sector's gender gap, with women accounting for 46% of all existing programme beneficiaries and 39% of graduates as of 2022.

#### Lessons Learned: How to improve Programme Accessibility and Design

The AMIR programme increased its accessibility by:

- Making tuition fees simple
- Having diverse partners
- Ensuring the affordability and financial sustainability of the programme

### Its Master programme design was successful due to:

- Its focus on contemporary challenges
- Its ability to capitalise on existing EIT networks and activities
- Frequent communication between partners



**RawMaterials** 

Co-funded by the European Union



#### Replicable if Strong Partnerships and Affordability are Emphasised

AMIR is a great example of how to integrate a combination of STEM and entrepreneurial education to create a strong and sustainable entrepreneurial ecosystem. This approach can be replicated in other educational programmes provided they:

• Create and maintain strong partnerships with academia, industry, and RTO partners with the goal of giving learners a well-rounded experience and easy pipeline to the market

- Communicate constantly and openly within this ecosystem
- Explore sustainable funding options for student scholarships
- Promote participation in activities and events
- Develop an evaluation framework to measure the programme's impact and increase its responsiveness to challenges

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