Get involved!

Join us in developing a European circular economy for RE magnets. There are many ways to get involved:

- Learn more about the project and test our e-car at one of the SUSMAGPRO cities roadshow stops near you.
- Participate in a technical training session dedicated to capacity building of young scientists, engineers, industrial representatives and customers.
- Have your say and provide input for policy recommendations on future research priorities and innovation strategies for a circular economy of permanent magnets.
- If you are involved in a related project in the field, get in touch to discuss synergies and joint activities!



We welcome your support and interest!
Learn more and contact us here:

https://susmagpro.eu/get-involved/



SUSMAGPRO PARTNERS







































MORE INFO AND WAYS TO GET IN TOUCH

For further information and to follow our project progress visit www.susmagpro.eu

Sign up for our newsletter and get the latest project news straight to your inbox!

https://susmagpro.eu/contact/







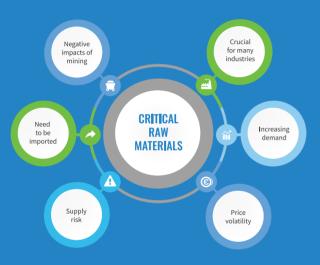
RECOVERING, RECYCLING AND REUSING
RARE-EARTH MAGNETS FOR A SUSTAINABLE
AND PROSPEROUS FUTURE IN EUROPE



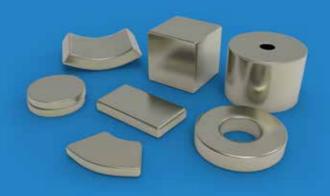
SUSMAGPRO has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 821114.

Challenges and Project Vision

Rare-earth magnets play a crucial role in many European industries such as automotive, aerospace renewable energy or e-mobility and constitute an integral part of consumer goods like loudspeakers or headphones. However, EU demand is hardly met by EU production and the market is subject to price volatility and supply risk. On top of that, the mining of rare-earth elements (REE) causes significant environmental damage. And demand is rising!

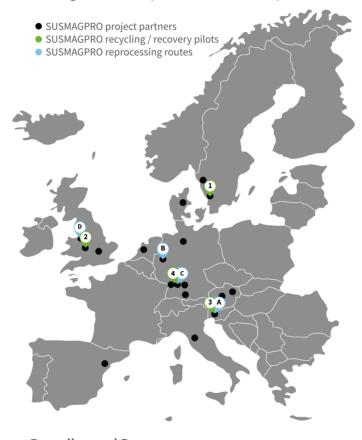


To address these challenges, SUSMAGPRO, a project funded by the European Union's Horizon 2020 programme, aims to demonstrate the Sustainable Recovery, Reprocessing and Reuse of Rare-Earth Magnets in a European Circular Economy.



Solutions Provided by SUSMAGPRO

In the frame of SUSMAGPRO, research institutions work together with industry partners to develop technological solutions at several levels for a circular supply chain of rare earth magnets. The innovative solutions regarding recycling, recovery and reprocessing are tested at pilot sites all over Europe:

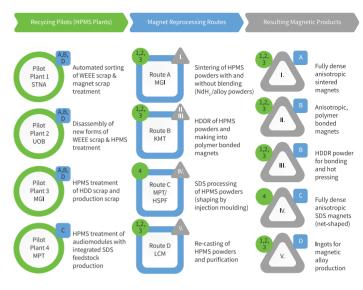


Recycling and Recovery

- New sensing and robotic sorting lines for recovery and recycling of magnetic materials
- Pilot scale production of reusable powders

Reprocessing

 Pilot reprocessing routes for the remanufacturing of magnets and recasting of alloys improving advanced techniques with higher yield and reduced waste production



These efficient, tailormade solutions provide end-user-ready magnetic products. They are benchmarked against primary material and demonstrated in a variety of end-products such as motors of electric cars, water pumps, loudspeakers and headphones. SUSMAGPRO magnets are also tested to Siemens Gamesa specifications for wind turbines.

Project Objectives



- Extract 6 tonnes of neodymium-iron-boron (NdFeB) powders per year
- Establish four plants producing 110t/yr reusable NdFeB powders
- Produce tailormade solutions for the industry
- Create demonstrators such as motors, headphones



- Identify and assess main sources of waste material
- Produce 15% of EU demand for NdFeB magnetic products within 5 years of the project



- Reduce environmental impacts and health risks
- Reduce energy consumption, waste and environmental damage



- Raise awareness on the benefits of a circular economy
- Find synergies with related projects