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Permanent Magnet to REE metal or REE alloy. The DysCovery project process routes

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Rare Earth permanent magnets (REPM) are powerful magnets and widely used on the market. The amount of REPM in applications range from grams (electronic applications) to several tons (wind power generators). The major supply of REE for the EU is coming from China and other third party countries. The reuse and recycling of end-of-life (EOL) magnets is important to meet the future demands of the EU in terms of green energy transformation. Within the EIT RawMaterials funded project DysCovery, the entire route of EOL magnet recycling will be demonstrated. Spent NdFeB and SmCo are hydrometallurgically processed. Pure RE salts will be refined via molten salt electrowinning and new magnets based on recycled material will be produced and tested. Activities of the collaborations DysCovery, REEsilience and other research will contribute to new recycling strategies for the EU.

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Session Classification: Working session on recycling (Intro)