The objectives of the ProMine project address the reduction of the 11 billion € trade deficit in metal and mineral imports in the European Union. ProMine focuses on two parts of the production chain targeting extractive and end-user industries. Upstream, the first ever Pan-EU GIS based mineral resource and advanced modeling system for the extractive industry will be created, showing known and predicted, metallic and non-metallic mineral occurrences across the EU. Detailed 4D computer models will be produced for four metalliferous regions. Upstream work will also include demonstrating the reliability of new (bio) technologies for an ecoefficient production of strategic minerals, driven by the creation of on-site added value and the identification of specific needs of potential end-users. Downstream, a new strategy will be developed for the European extractive industry which looks not only at increasing production but also at delivering high value, tailored nano-products which will form new materials for the manufacturing industry. ProMine research will focus on five nano-products (Conductive metal - Cu, Ag, Au - fibres, rhenium and rhenium alloy powders, nano-silica, iron oxyhydroxysulphate and new nano-particle based coatings for printing paper). They will be tested at bench scale, and a number selected for development to pilot scale where larger samples can be provided for characterization and testing by end-user industries. It will include production, testing and evaluation of these materials, with economic evaluation, life cycle cost analysis, and environmental sustainability. ProMine with 27 partners from 11 EU member states, has a strong industrial involvement while knowledge exploitation will transfer ProMine results to the industrial community. Its budget is 17 million € for the 4 years lifetime of the project.

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