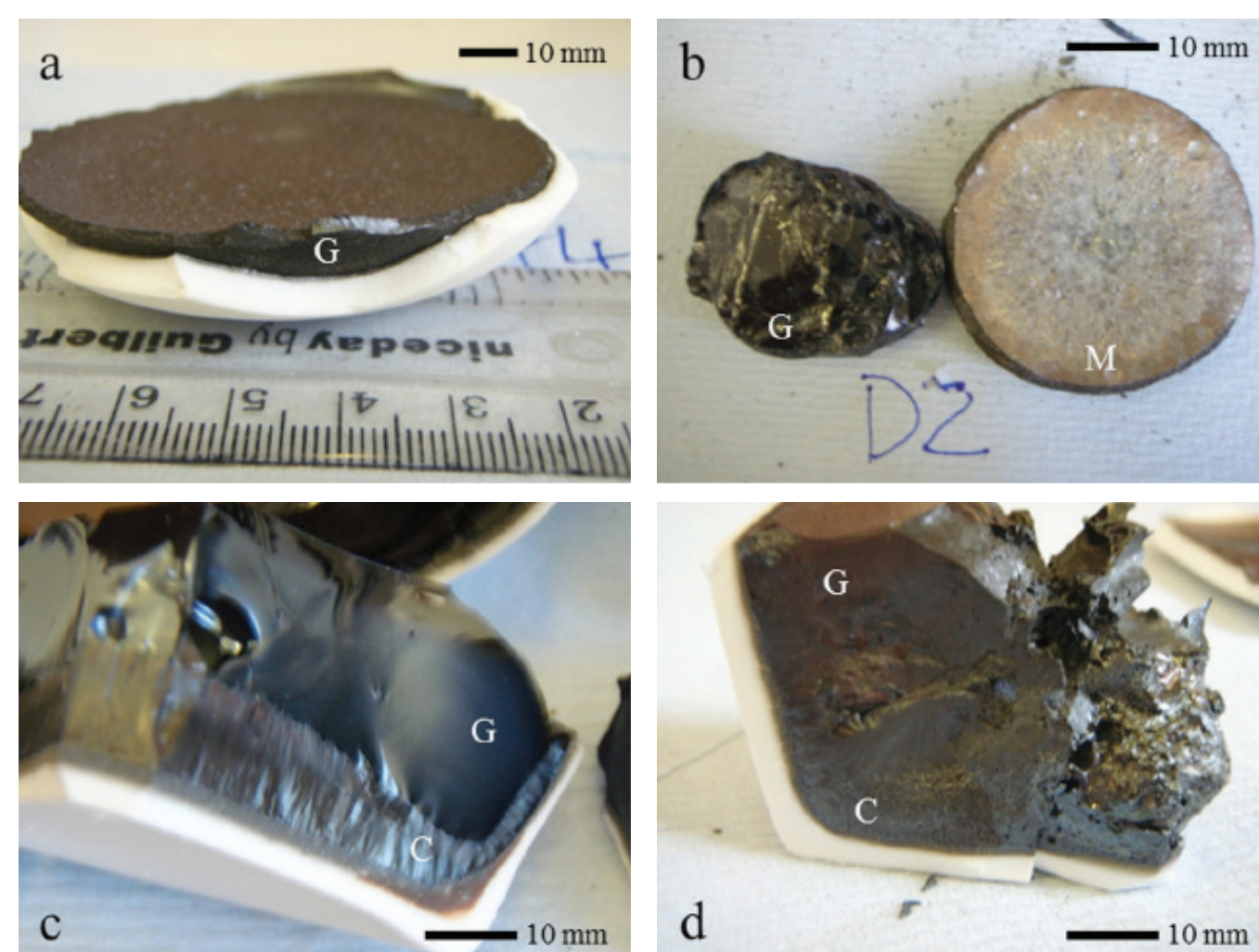


thermal treatment for radioactive waste minimisation and hazard reduction

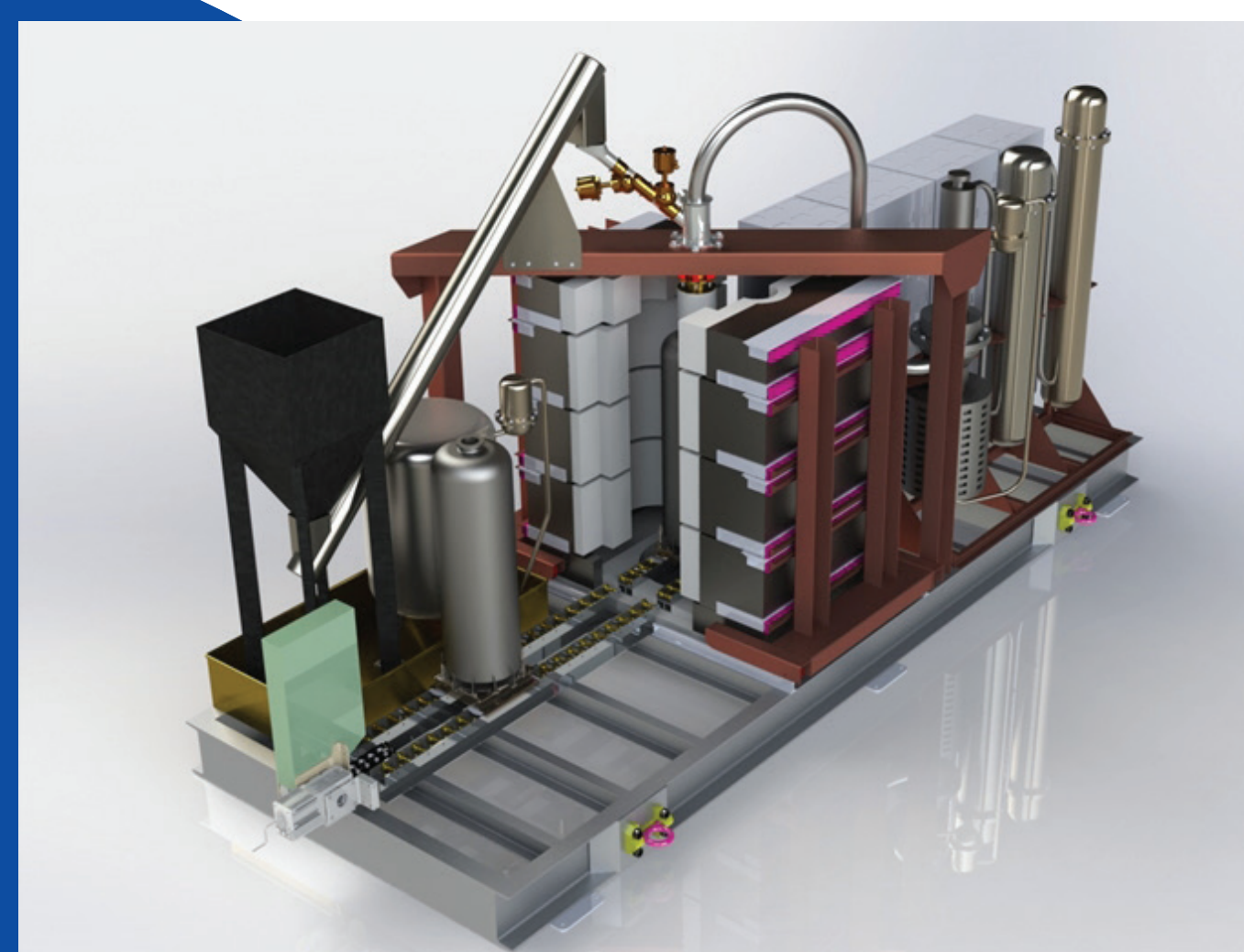
theramin aims to identify which wastes could benefit from a thermal treatment, which processes are under development in participating countries, and how these can be combined to deliver the following benefits.



A variety of vitrified simulant PCM drum mock ups (a) PVC waste, (b) metal waste, (c) masonry waste, and (d) mixed waste, the glass (G) and crystalline (C) components of the slag fraction, and metallic fraction (M) are labelled.

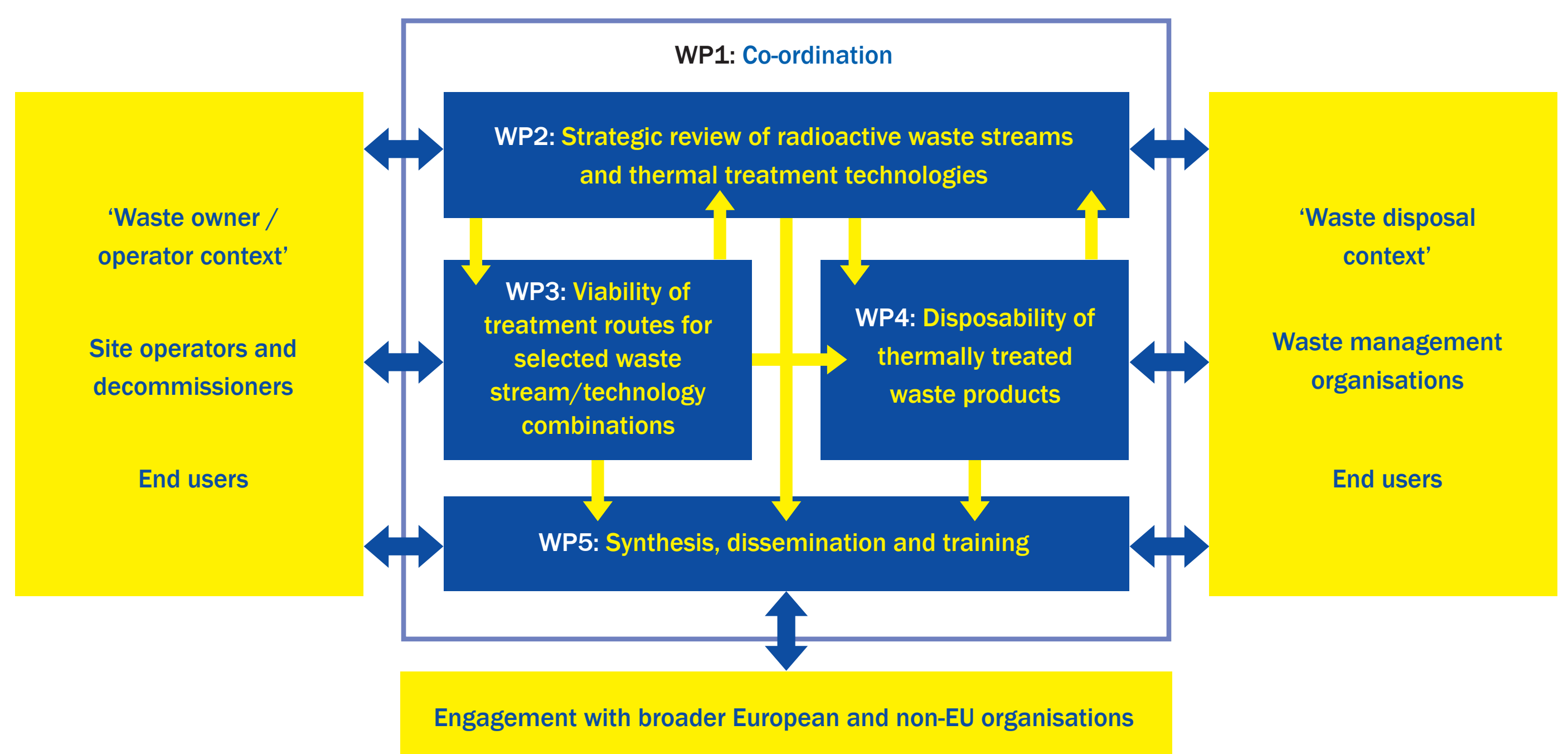
Benefits of thermal treatment:

- Significant volume reduction and passivation
- Lifecycle cost savings
- Allows best use of storage and geological disposal capacity
- Hazard and long-term risk reduction
 - Reduce gas generation potential of waste streams
 - Reduce leaching rate of wastes following disposal



One example pilot plant.

theramin is being carried out by a consortium of 12 partners representing a European-wide community of experts on thermal treatment technologies and radioactive waste management and disposal. The project includes an advisory group of waste producers and management organisations to provide an end user view.



The theramin work programme involves:

- Interaction with waste management organisations and waste producers to collate and understand challenging components of the waste inventory
- Strategic review of opportunities for application of thermal treatment in Europe
- Technology R&D to demonstrate and evaluate, at rig-scale, leading thermal treatment technologies
- Characterisation of thermally treated waste products
- Work with the waste management organisations on disposability of thermally treated products
- Establishment of a European network of thermal treatment experts capable of advising on policy, and able to connect back into national programmes of work
- Integration of project outputs and development of a roadmap for thermal treatment technology advancement in Europe

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