Flexible laser cutting solution for nuclear decommissioning

The decommissioning of a power reactor can take up to several decades after it ceases its operation. As a result, the EU supports innovations that improve existing technologies for dismantling, risk characterisation and assessment, on-site waste management and environmental remediation. Existing conventional cutting techniques result in limited effectiveness. During the last decade, laser cutting technology emerged as a promising alternative for the segmentation of the reactor pressure vessel and internals. The EU-funded LD-SAFE project will confirm the laser cutting technology for the dismantling of the most critical components of nuclear
It will demonstrate the capabilities of a flexible laser cutting solution that meets the key technical challenges in dismantling, assessing its environmental and safety impacts and proving the economic advantages of its use.

**Fields of science**

engineering and technology  >  other engineering and technologies  >  nuclear engineering  
natural sciences  >  physical sciences  >  optics  >  laser physics

**Keywords**

Decommissioning  Dismantling  Reactor  Pressure vessel  Internals  
Laser  Cutting  In-air  Underwater  Safety  Environment  
Assessment  Qualification  Prototype  Demonstrator  Economic  Time  
Market

**Programme(s)**

H2020-Euratom - Euratom  
H2020-Euratom-1. - Indirect actions  

**Topic(s)**

NFRP-2019-2020-09 - Fostering innovation in decommissioning of nuclear facilities  

**Call for proposal**

NFRP-2019-2020  

See other projects for this call

**Funding Scheme**

IA - Innovation action
Coordinator

ONET TECHNOLOGIES CN
Net EU contribution
€ 934 076,80
Address
36 boulevard de l’ocean
13009 Marseille
France
Region
Provence-Alpes-Côte d’Azur > Provence-Alpes-Côte d’Azur > Bouches-du-Rhône
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 704 653,45

Participants (6)

COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES
France
Net EU contribution
€ 665 466,30
Address
Rue leblanc 25
75015 Paris
Region
Ile-de-France > Ile-de-France > Paris
Activity type
Research Organisations
Links
CENTRE D’ETUDE SUR L’EVALUATION DE LA PROTECTION DANS LE DOMAINE NUCLEAIRE

France

Net EU contribution

€ 10 380,00

Address

Route de la redoute 28
92260 Fontenay-aux-roses

Region

Île-de-France > Île-de-France > Hauts-de-Seine

Activity type

Research Organisations

Other funding

€ 0,00

TRANSNUBEL

Belgium

Net EU contribution

€ 399 917,00

Address

Simon bolivarlaan 34
1000 Brussel

Region

Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussel-
Hoofstad

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding

€ 171 393,00

VYSUS SWEDEN AB

Sweden

Net EU contribution

€ 199 655,75

Address

Box 1288
172 25 Sundbybergs

SME

Yes

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding

€ 85 566,75

TECNATOM S.A.

Spain

Net EU contribution

€ 339 587,50
INSTITUT DE RADIOPROTECTION ET DE SURETE NUCLEAIRE
France
Net EU contribution
€ 250 028,75
Address
Av de la division leclerc 31
92260 Fontenay aux roses
Region
Ile-de-France > Ile-de-France > Hauts-de-Seine
Activity type
Research Organisations
Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network
Other funding
€ 0,00

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Permalink: https://cordis.europa.eu/project/id/945255