

Hazardous Gas monitoring with IoT enabled Drone in **Underground Tunnels and Cavities**

by











Underground mines and tunnels are characterized by tough working and hazardous environmental conditions. In such environments, serious accidents may occur due to sudden risks caused by toxic gasses, dust, dangerously flammable gasses or low-oxygen conditions. Ecodrone will develop novel robotic sand IoT technologies to be integrated into a multi-gas sensor platform, for automating hazardous gasses concentration measurement in hard-toreach places. A system prototype will be demonstrated in an underground tunnel facility. Therefore, the adopter will leverage the developed solution for improving the currently used approach on gas monitoring activities, whereas the technology providers will have the opportunity to enter a new market with strong exploitation potential.

Vertical sector addressed

Challenges tackled by SMEs

Key actions addressed

ICT

- New Innovation Technologies
- IoT
- Health and Safety

KA 5

- KA 6

MINE-Demo scheme

