HUB TECH IA

Deliverable report 51

AI and IAGEN Application Use Case

Environmental Risk Assessment in Water Management in Vaca Dead, Neuquén

Classification of deliverable report 51: Environmental Risk Assessment with AI in Water Management in Vaca Muerta

ÿ Classification 1: By Main Resource

Water + energy

- The report focuses entirely on environmental water management (monitoring, pollution detection, use of sensors and prediction of water risks).

Classification 2: By Activity within Vaca Muerta

Energy Efficiency and Sustainability

- Priority is given to water sustainability, impact prevention, and detection leak detection and environmental compliance using AI technologies, with emphasis on prevention and environmental planning.

Classification 3: Type of AI Technology Used

1ÿÿGenerative AI Models (for simulations and automatic report generation)

2ÿÿMachine Learning Algorithms (anomaly detection, prediction)
 of risks)

3ÿÿNatural Language Processing (NLP) (automatic reports and
 stock recommendation)

4ÿÿComputer Vision and Image Analysis Systems (satellite and
 geospatial

analysis) 5ÿÿAI Systems Based on Intelligent Agents (continuous and

autonomous monitoring) 6ÿÿAI Platforms for Data Integration and Big Data (dashboar
 integration of IoT sensors, risk maps)