



## **AI and IAGEN Application Use Case**

### **Documentation Automation in Vaca Muerta, Neuquén, Argentina.**

#### **Classification of deliverable report 34: "Documentation Automation in Vaca Muerta, Neuquén, Argentina":**

##### **Classification 1: By Main Resource**

- Selected option: Oil, and Gas, Water + energy (approach)
- Justification:

Although the report focuses on logistical and administrative aspects, it applies to the entire energy operation in Vaca Muerta, covering documentation on hydrocarbon transportation, resource consumption (fuel, emissions), environmental safety, and regulatory compliance. It addresses transversal form, applicable to all stages of the value chain energy and all the resources involved.

##### **Classification 2: By Activity within Vaca Muerta**

- Selected option: Information Management and Decision Making
- Justification:

The focus is on the automation of operational and logistical documentation, Real-time data integration using IoT, RPA and IT systems natural language processing, which allows for better traceability, compliance and informed decision-making based on automatically generated information.

##### **Classification 3: Type of AI Technology Used**

- Main selected option:

1. Generative AI Models,  
3. Natural Language Processing (NLP) Systems, 6. AI  
Platforms for Data Integration and Big Data, 5. AI Systems  
Based on Intelligent Agents.

- Justification:

An agentic flow based on IoT sensors, RPA, agents is described.  
generators such as GPT-4, and digital distribution of documents. It is also  
They use NLP techniques to analyze documentary content, detect  
anomalies and facilitate automated decisions. The solution includes  
ERP integration, logistics data analysis, and report generation  
environmental and regulatory in real time.

#### Classification 4: By Strategic Impact on the Industry

1. Selected option: Strategic Decision Making and Data Analysis

2. Justification:

The report highlights strategic benefits such as error reduction,  
Regulatory compliance, document traceability, cost reduction  
administrative, and improved safety and environmental management. All of this  
It favors quick, reliable decisions based on data generated  
automatically by intelligent systems.