



AI and IAGEN Application Use Case

Generative Artificial Intelligence (IAGEN) for construction and installation - Logistics support - Report and response generation frequent

Classification of deliverable report 17: "Generative Artificial Intelligence (IAGEN)" for construction and installation - Logistic support - Generation of reports and Frequently asked questions in Vaca Muerta:

Classification 1: By Main Resource

- Selected option: Oil and Gas (main), Water + energy (secondary).
- Justification:

The report mainly addresses logistical support, report generation and operational management oriented to activities related to the extraction and production of oil and gas. It also considers water and energy as important secondary resources, especially highlighting optimizing water use in critical processes such as fracking.

Classification 2: By Activity within Vaca Muerta

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

The central focus of the report is the intelligent automation of generation operational, logistical, environmental and financial reports, as well as the Logistics support through prediction and optimization based on analysis advanced. In addition, it includes automated systems to respond

frequently asked questions, significantly facilitating operational management and strategic decision-making.

Classification 3: Type of AI Technology Used

- Main selected option:

1) Generative AI Models,
2) Machine Learning Algorithms,
3) Natural Language Processing (NLP) Systems, 6) AI
Platforms for Data Integration and Big Data.

- Justification:

The report specifically details the use of IAGEN (as GPT-4 Turbo) for the automated generation of accurate reports and dynamic responses to frequently asked questions, integrating processing capabilities advanced natural language. It also clearly mentions the implementation of advanced predictive algorithms for logistics and predictive maintenance, as well as the integration of operational data in real-time through IoT sensors and Big Data platforms for analysis deep and predictive.

Classification 4: By Strategic Impact on the Industry

- Selected option: Strategic Decision Making and Data Analysis

- Justification:

The report particularly emphasizes the strategic importance of generation automated detailed and timely reports that facilitate decisions informed in critical aspects such as production, logistics, security, environmental sustainability, and finance. Concrete benefits are highlighted in reduction in operating costs (20-30%), significant increase in operational safety and a significant reduction in operational errors, all essential elements for effective strategic decision-making.