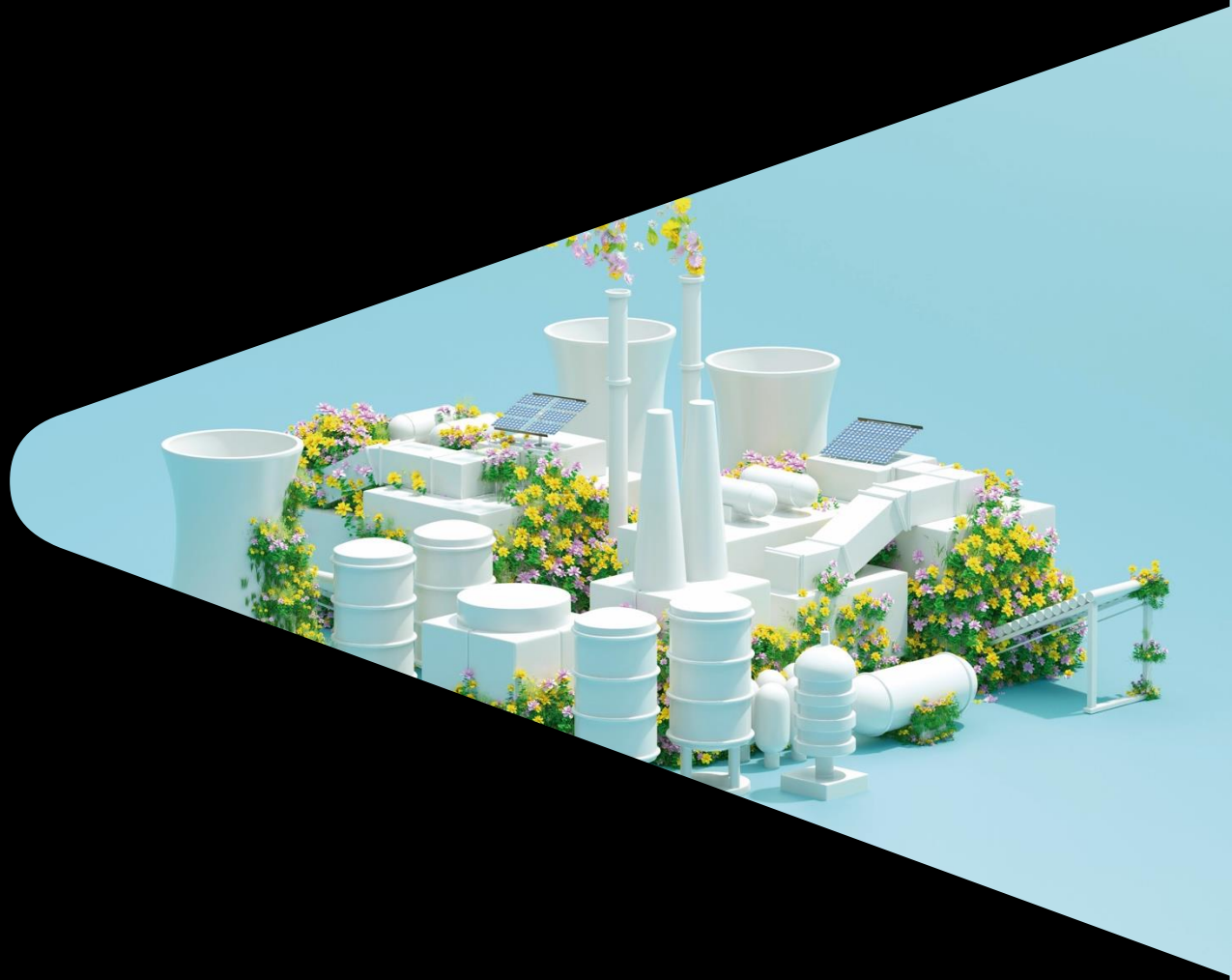
PNAV PROGRAMA NACIONAL DE ALGORITMOS VERDES

Green AI

El futuro sostenible de la Inteligencia Artificial



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GOBIERNO DE ESPAÑA MINISTERIO PARA LA TRANSFORMACIÓN DIGITAL Y DE LA FUNCIÓN PÚBLICA SECRETARÍA DE ESTADO DE DIGITALIZACIÓN E INTELIGENCIA ARTIFICIAL

Plan de Recuperación, Transformación y Resiliencia

ENIA ESTRATEGIA NACIONAL DE INTELIGENCIA ARTIFICIAL

España | digital 2026

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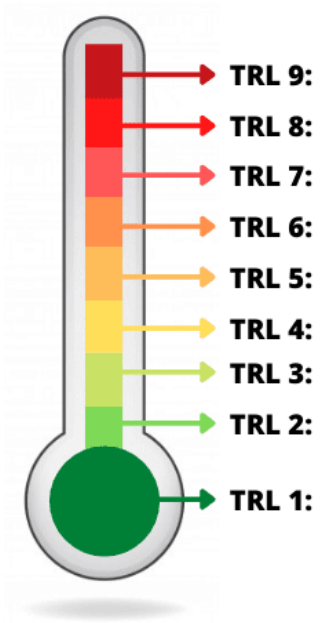

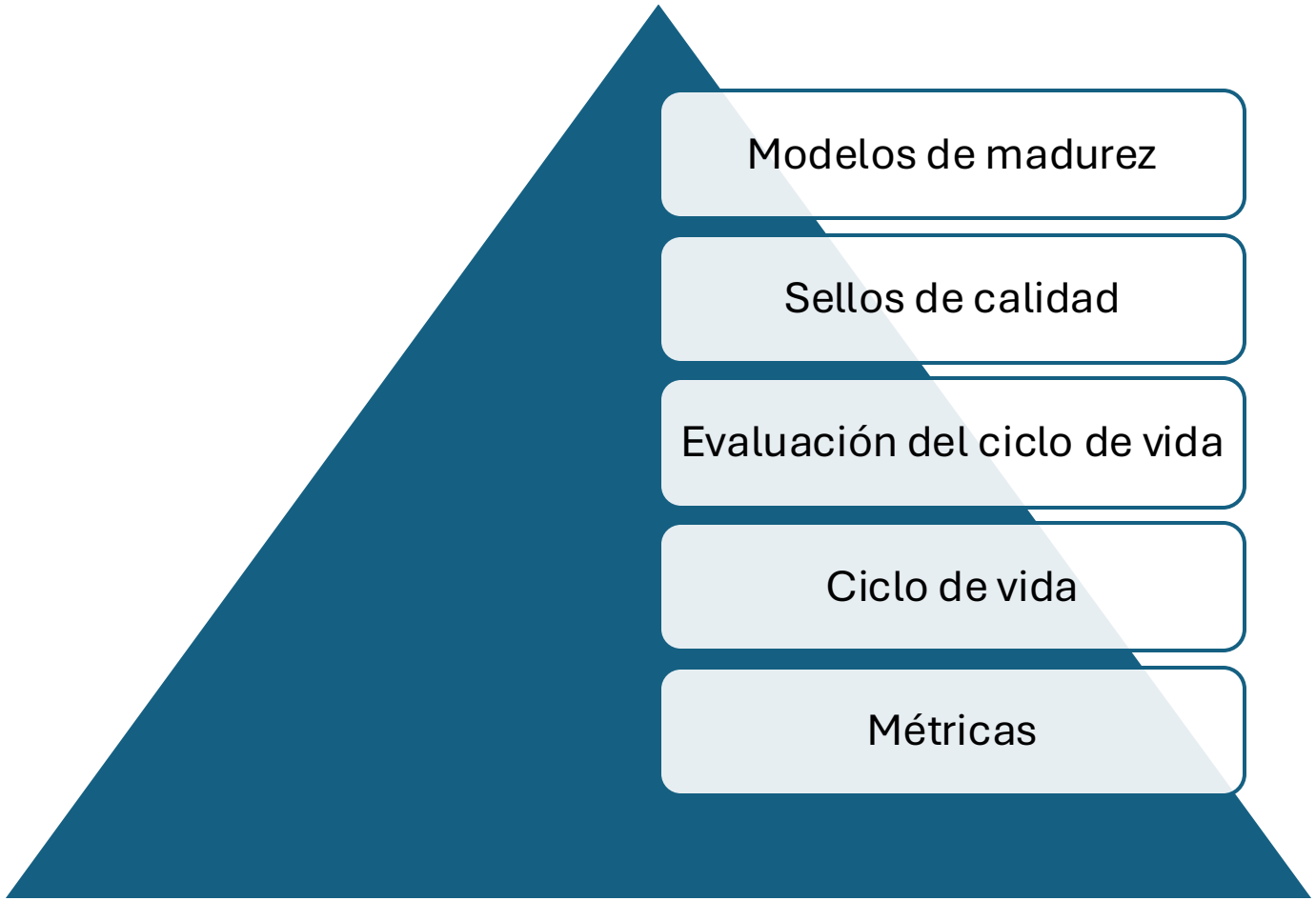

Trabajos seminales en “Green IT”

ML.ENERGY

ML.ENERGY Leaderboard

ZEUS

https://ml.energy/zeus/

CODE CARBON

https://codecarbon.io/

ML CO2 Impact

https://mlco2.github.io/

ML.ENERGY Leaderboard

LLM Chat | LLM Code | VLM Visual Chat | Diffusion Text to image | Diffusion Text to video | Diffusion Image to video | LLM Leaderboard (legacy) | Colosseum ⚔

About

How much energy do GenAI models consume?

LLM chatbot response generation

Large language models (LLMs), especially the instruction-tuned ones, can generate human-like responses to chat prompts. Using Zeus for energy measurement, we created a leaderboard for LLM chat energy consumption.

More models will be added over time. Stay tuned!

GPU

☑ A100-SXM4-40GB ☐ H100 80GB HBM3

☐ Show more technical details

Model	Parameters (Billions)	GPU model	Energy per response (Joules)
Gemma 2 2B	2	A100-SXM4-40GB	40.42
Mistral 7B	7	A100-SXM4-40GB	43.76
Phi 3 Small	7	A100-SXM4-40GB	44.89
Llama 3.1 8B	8	A100-SXM4-40GB	51.12
Phi 3 Mini	4	A100-SXM4-40GB	54.59
Mistral Nemo	12	A100-SXM4-40GB	66.71
Gemma 2 9B	9	A100-SXM4-40GB	68.24

Trabajos seminales en "Green IT"

Green Software Foundation

https://greensoftware.foundation/

https://greensoftwareinitiative.com/

EUROPEAN GREEN DIGITAL COALITION

https://www.greendigitalcoalition.eu/

Hugging Face

https://huggingface.co/

Green Algorithms

https://www.green-algorithms.org/

GRACIAS