EUROPEAN GREEN DIGITAL COALITION

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GlobalLogic
A Hitachi Group Company

GlobalLogic is a digital engineering services company and part of the Hitachi Group. It helps enterprises design, build, and operate digital products, software platforms, data systems, cloud solutions, and AI capabilities.
GlobalLogic have developed the solution Agentic Operation Management (AOM) which is essentially an enterprise operating layer for AI agents. Rather than being an agent itself, it acts as the governance, orchestration, and management platform that sits above individual agents.
The solution has been implemented within GlobalLogic's internal operations from December 2025 to April 2026.

This case study is an ex-post assessment assessing the effect of AOM's model right-sizing (i.e., the practice of automatically selecting the smallest and least resource-intensive AI model capable of completing a task to the required quality standard, rather than always using the largest model).

Organisational contribution: GlobalLogic is the developer of the solution and in the implementation context of this study is also responsible for deploying the solution. This aligns with A-level classification as defined by ITU-T L.1480 (contribution of implementing the integrated solution or the innovation of the solution).

Quantified impacts:

4 months, extrapolated to 1 year	USA: -13.7 to -3.8 kgCO2e/year Germany: +0.3 to 0.9 kgCO2e/year Combined: -3.6 to -12.8 kgCO2e/year	USA: -8.8 x 10^{-6} kgCO2/API request/year Germany: +0.6 x 10^{-6} kgCO2/API request/year Combined: -8.2 x 10^{-6} kgCO2/API request/year
Assessment period	***Net carbon impact range***	***Net carbon impact per API request***

Other identified impacts: **Reduction in electricity use** leads to significant cost savings. If GlobalLogic were to invest cost savings into the further development of energy optimisation solutions, rather than industry-average digital engineering services, emissions increases could be partially or completely negated.
AOM can also reduce electricity consumption by optimising other processing tasks, for example by caching existing answers, avoiding duplicate agents and duplicate computation, improving infrastructure utilisation, reducing failed or unnecessarily long AI runs. However, as the available data lends itself to evaluation of right-sizing, this is the sole focus of this case study.
An additional longer-term impact may be a reduction in need for as much hardware if processing reductions are sustained.

Website | **Contact GlobalLogic**

Relevant links: Contact the EGDC | Methodology | Calculator

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