

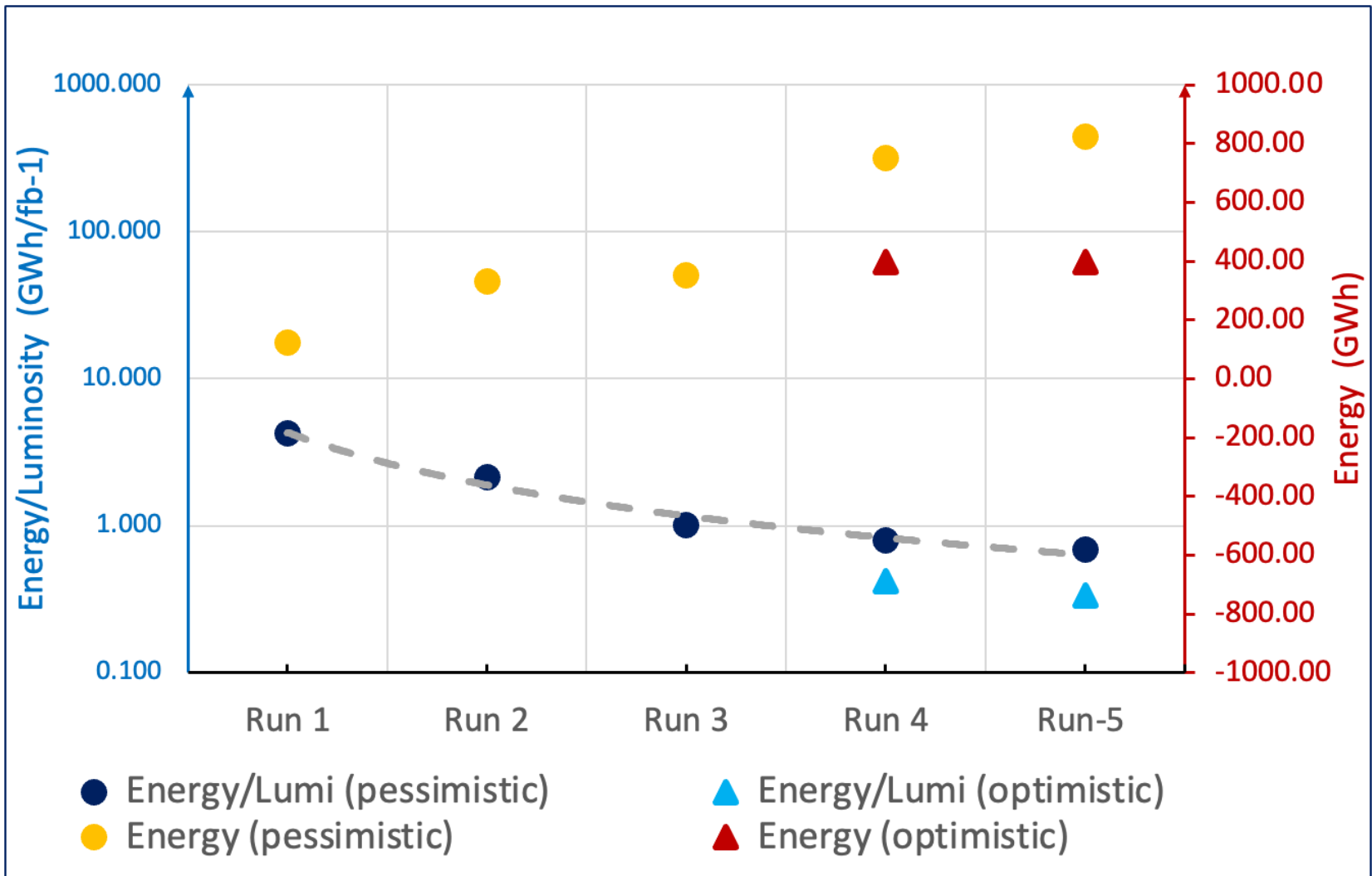
WLCG strategy

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Environmental Sustainability



Environmental sustainability: energy efficiency, green computing, carbon footprint

Environmental sustainability is a strategic area of priority for many of the WLCG federations and funding agencies [...] Providing information, opportunity, and incentive to help collaborators reduce the carbon footprint of computing needs should be a priority for WLCG as it is a priority of its funding agencies and a demonstration of social responsibility.

WLCG should elaborate a plan that covers the areas of software, computing models, facilities, and hardware lifecycle. The progress needs to be regularly measured and exposed and the proper metrics need to be defined. Particularly in the area of improving energy efficiency of the facilities, WLCG cannot mandate a schedule to the countries but should collect information and track the progress.

[ENV-1] WLCG to agree metrics and provide a framework to collect information related to energy efficiency.

[ENV-2] WLCG to enable the use of more energy-efficient hardware where possible, depending on the readiness of the experiment software and the common libraries.

[ENV-3] WLCG to develop and promote a sustainability plan to improve energy efficiency and/or reduce carbon footprint, covering software, computing models, facilities, and hardware technology and lifecycle.

Proposal

A lot of work happening in our community in the direction of environmental sustainability (experiments, sites, software community)

There are many aspects to consider: requires different kind of expertise

As a first step we propose to organise a workshop to present to the whole community the ongoing efforts. This will allow to identify synergies and gaps.
Target period: Fall 2024

The outcome of the workshop should include:

- Agreeing on the metrics
- Indicating the main areas of work
- Identifying opportunities to contribute

The progress should be regularly tracked according to the agreed metrics