

Flat Budget model

The “flat budget model” : expect a 15% increase in hardware capacity per year investing a constant budget

Pros:

- Simple; accurate in average

Cons:

- Large variations of HW cost depending on the country
- Does not take into account the relative cost of hardware (e.g. disk vs tape vs CPU)
- Takes into account only the cost of CPU/disk/tape and not the cost of infrastructure around it (network, energy, ...)

WLCG started an initiative to reconsider the definition of flat budget and make a proposal to the RRB

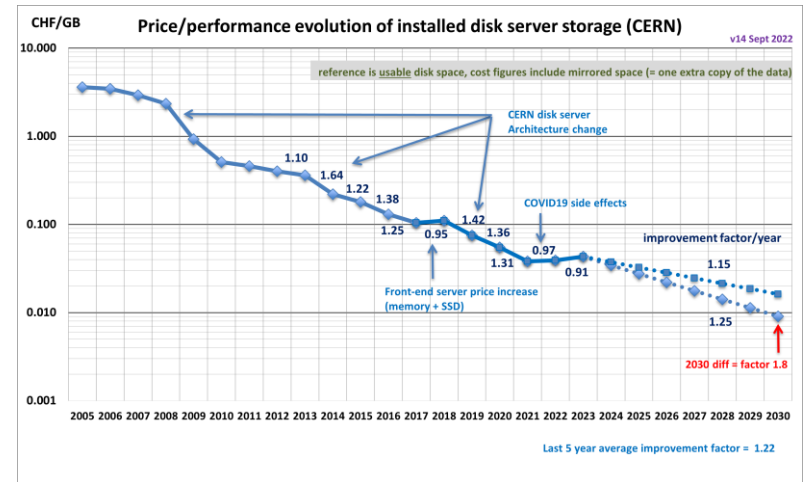
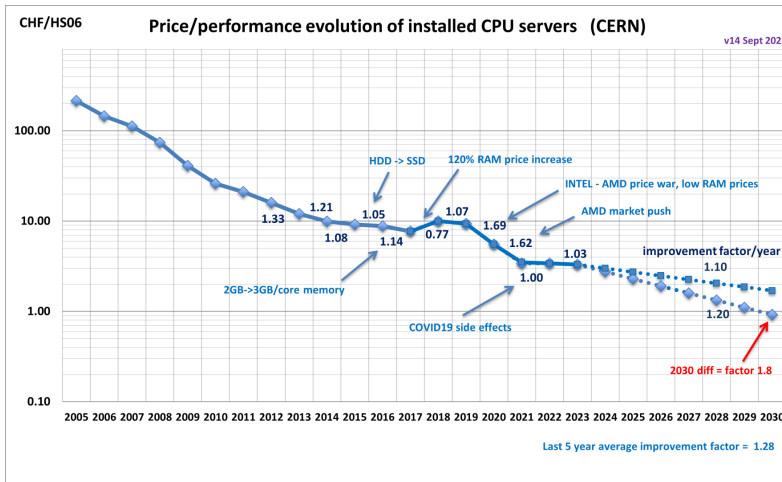
- Should remain simple and not go in the details of each site, while being accurate enough to provide an cost indication to the Funding Agencies

Hardware cost

CERN provides regularly these plots with the price per HS06 (CPU) and price per TB (disk and tape).

This is a very biased view as many countries observe very different trends

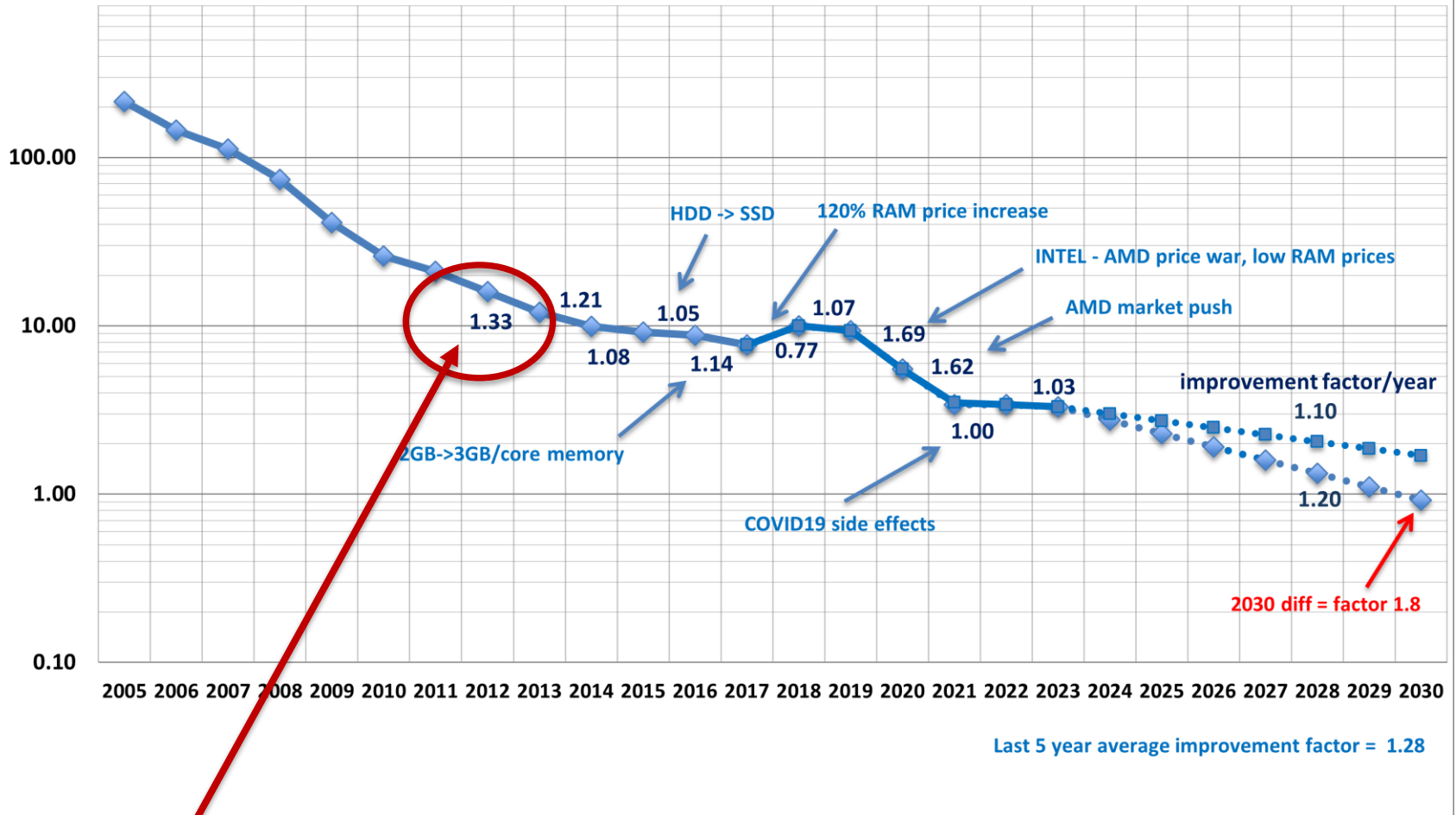
Can we have a better understanding of the variation of purchasing power **w/o exposing the cost of hardware** directly ?



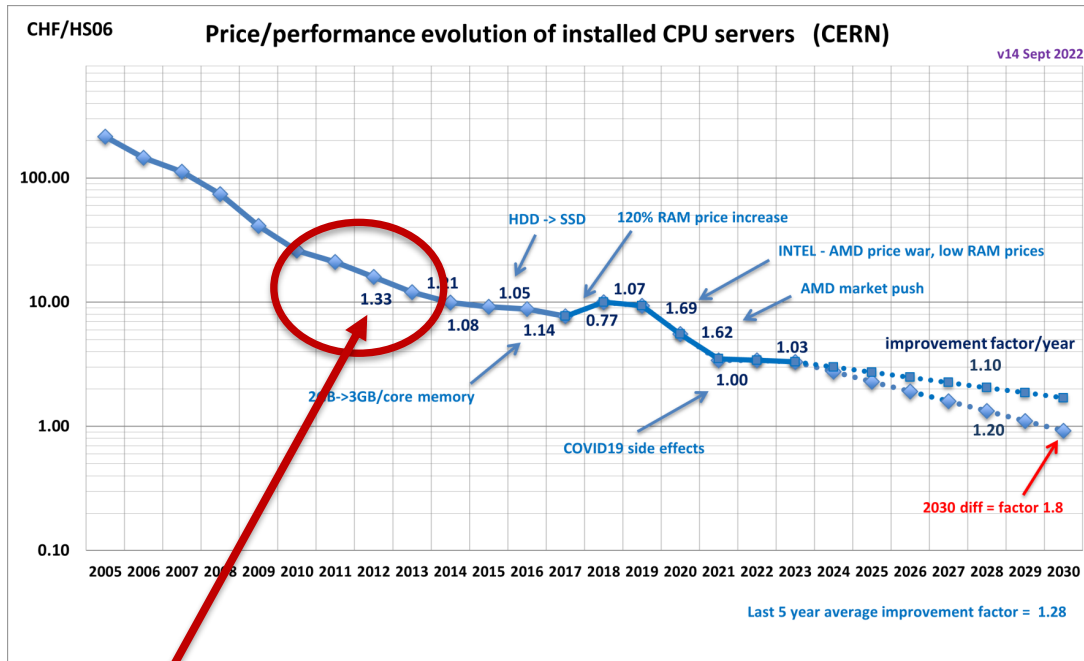
CHF/HS06

Price/performance evolution of installed CPU servers (CERN)

v14 Sept 2022



We do not need to expose the cost of hardware, but just the change from previous years



This variation is for the hardware only. Does not take into account the cost of the infrastructure (e.g. electricity). Can we collect this info as well, in addition?

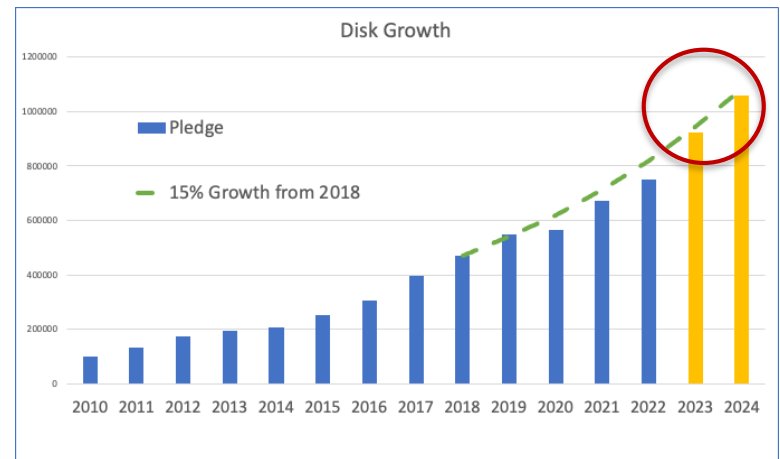
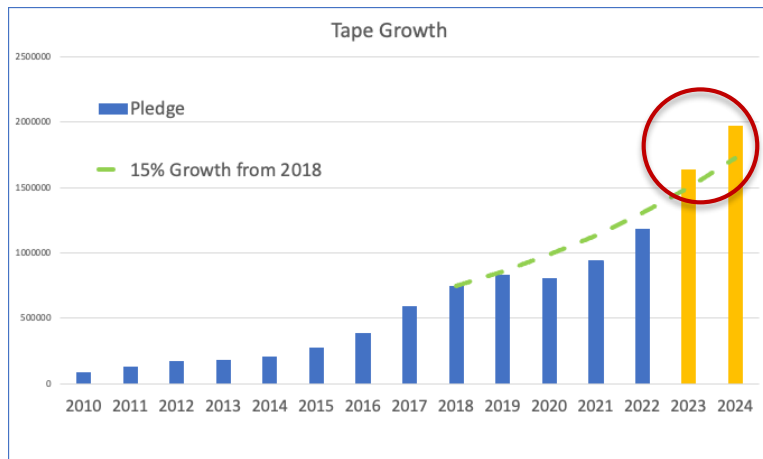
WLCG needs for 2024

2010-2022: summary of pledges

2023: requests agreed at the April 2022 RRB

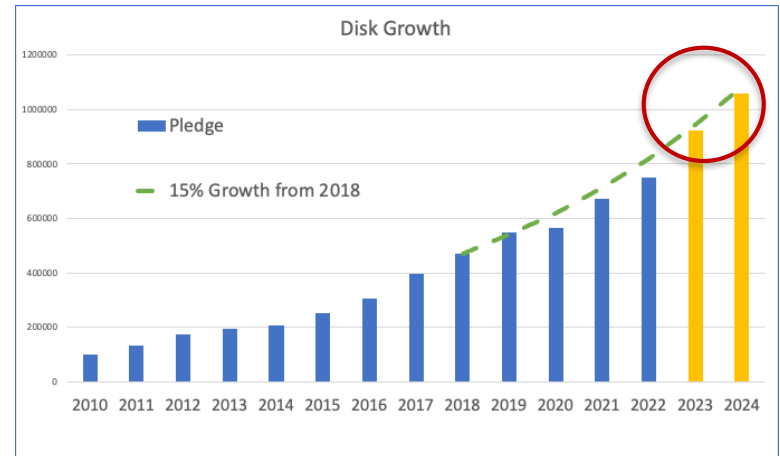
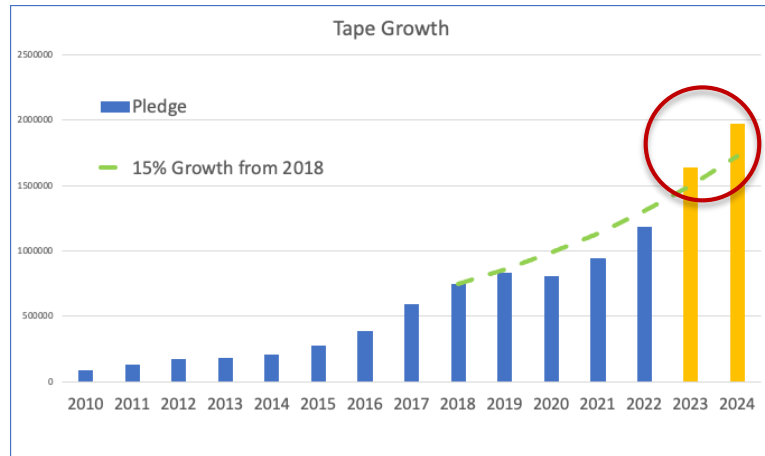
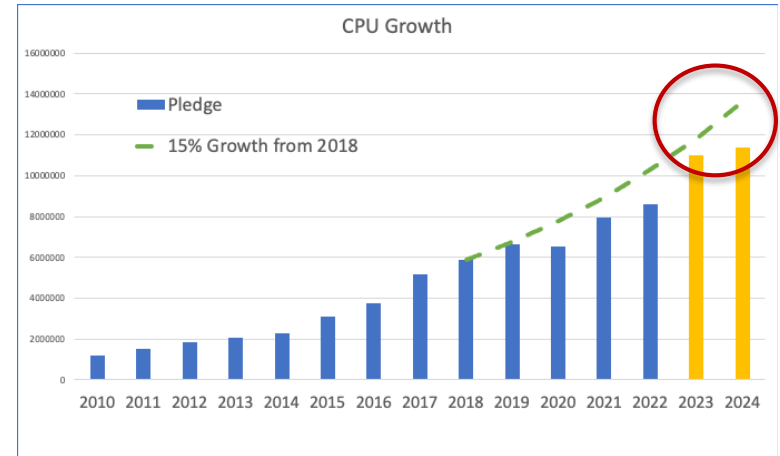
2024: preliminary requests at this RRB

Resource needs for 2024 are compatible with “flat budget” (calculated from 2018), assuming +15% CPU, disk, tape / year with the same budget



WLCG needs for 2024

Can we convert HS06, TB (disk) and TB (tape) into one “currency” ?



Discussion