

Sustainability Insights and POWEFF

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Motivation & Background

- Big Picture: Carbon Neutral by 2050
- Everybody is defining Milestones and how to reach there
 - Tracking against GHG Protocol Scope 1, 2, 3
 - The focus is to reduce GHG emissions linked to reducing power consumption
- Challenges associated with power
 - Data is not available at all and we have to fall back on data sheets
 - Data varies from device to device, even versions (current, voltage, power..)
 - The implementation is not consistent in terms of data modeling, transport, or encoding

Example: Calculate CO₂eq for the install base

Need:

1. Location
2. Current Inventory
3. Associated Power Consumption

Complication:

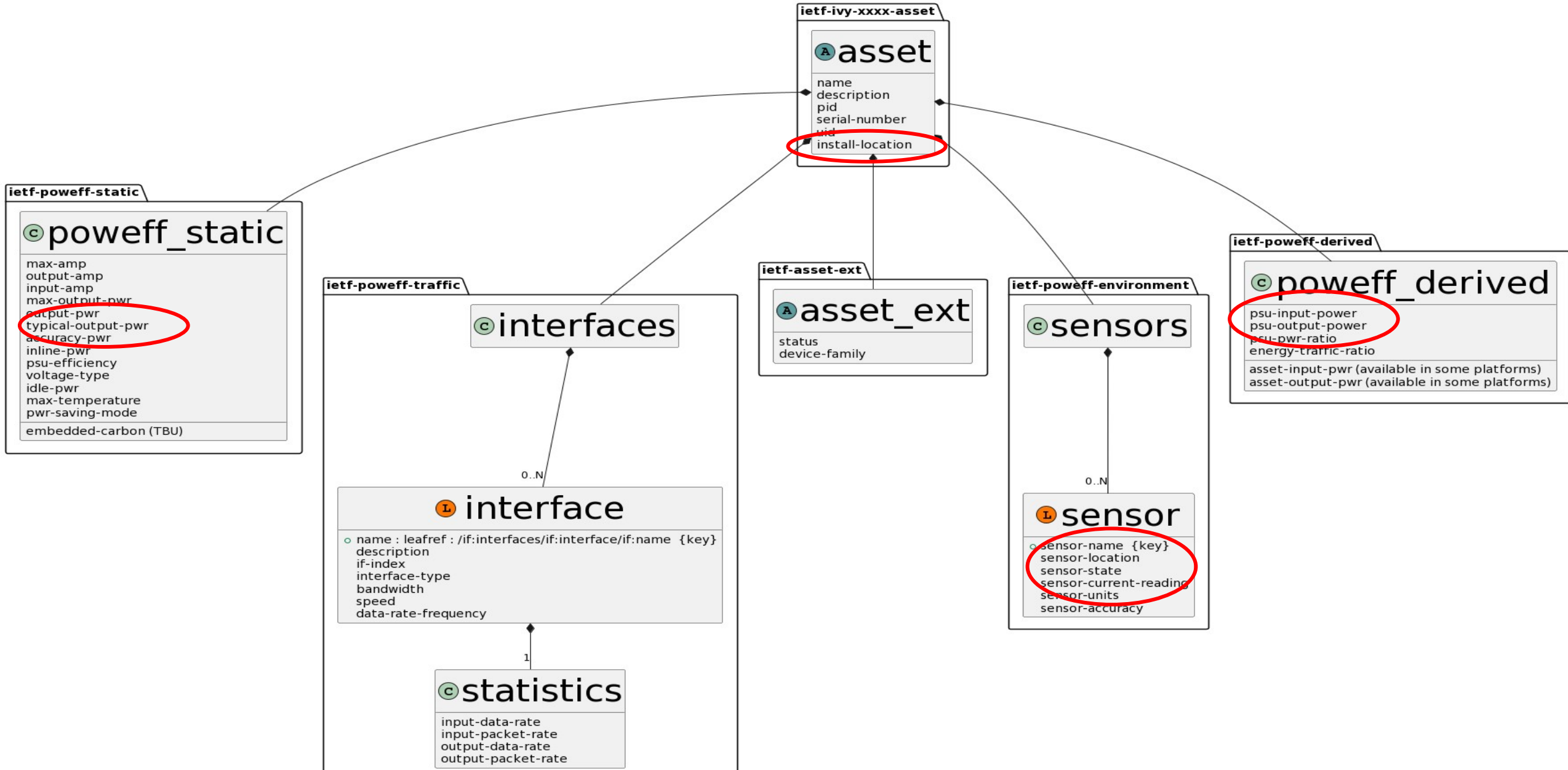
Real – Apparent – or - Estimated Power

Is a Power (V/C) sensor available on the device?

Carbon Emissions typically available per country/region or grid

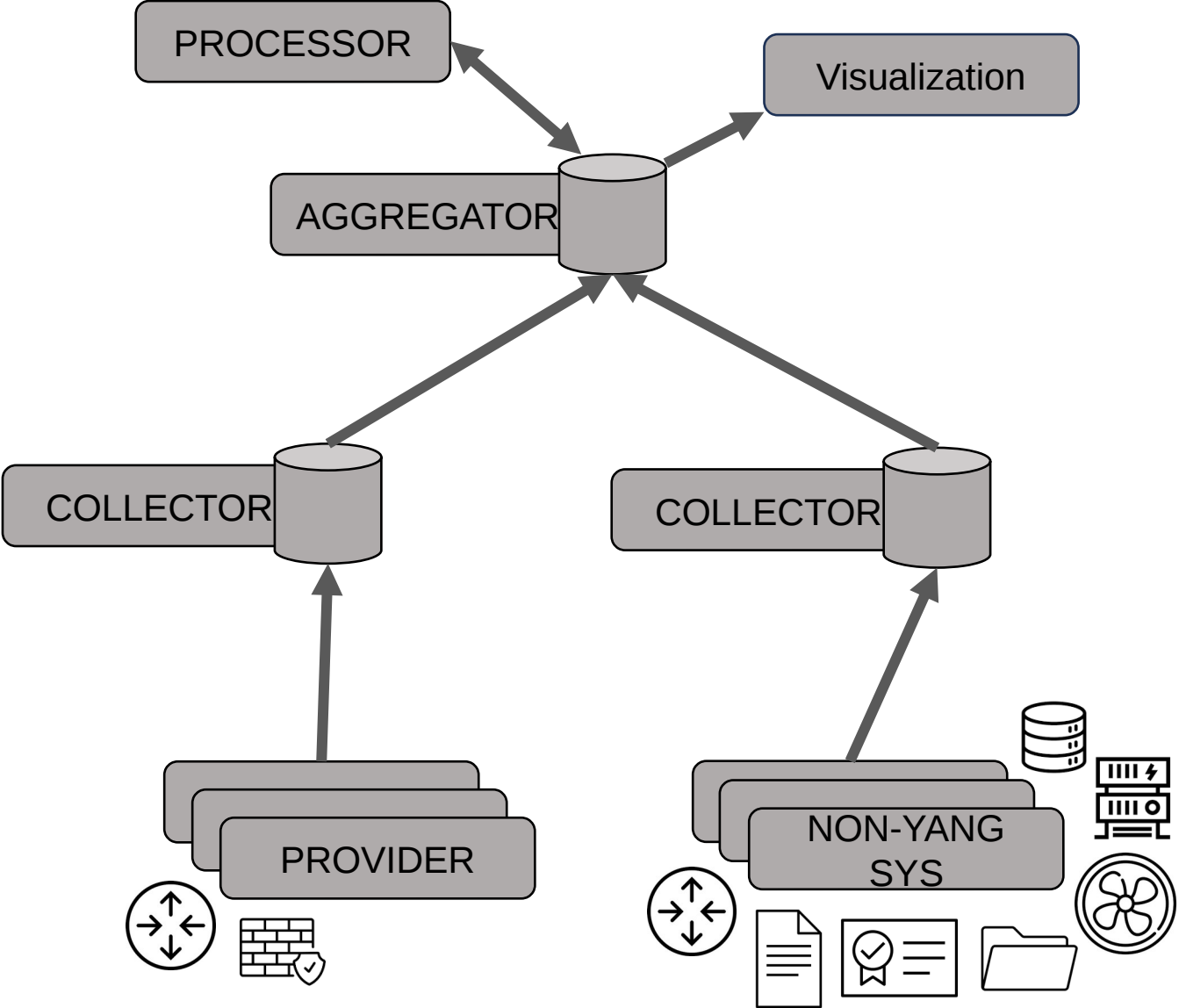
A lot of legacy products in production are not built for power optimization

POWEFF Data Model



Why Need for Sustainability Insights Framework

Standardized Data should help us facilitate the solutions.



Open Questions/Next Steps

Should this work be continued?

IVY vs OPSA vs other groups?

Are the derived metrics the right ones? Any other metrics to look at?

There is prior work being done that might be overlapping – contribution appreciated