



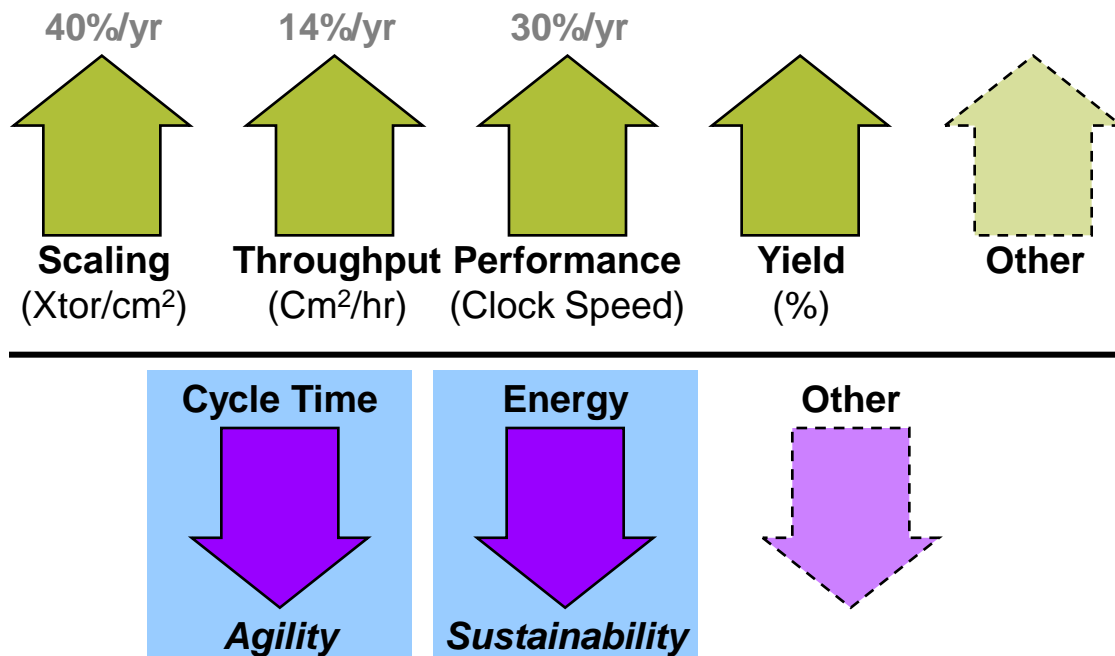
Redefining Fab Productivity

Fab Productivity Defined

$$\text{Productivity} = \frac{\text{Output}}{\text{Input}}$$

**Maximize
 Output**

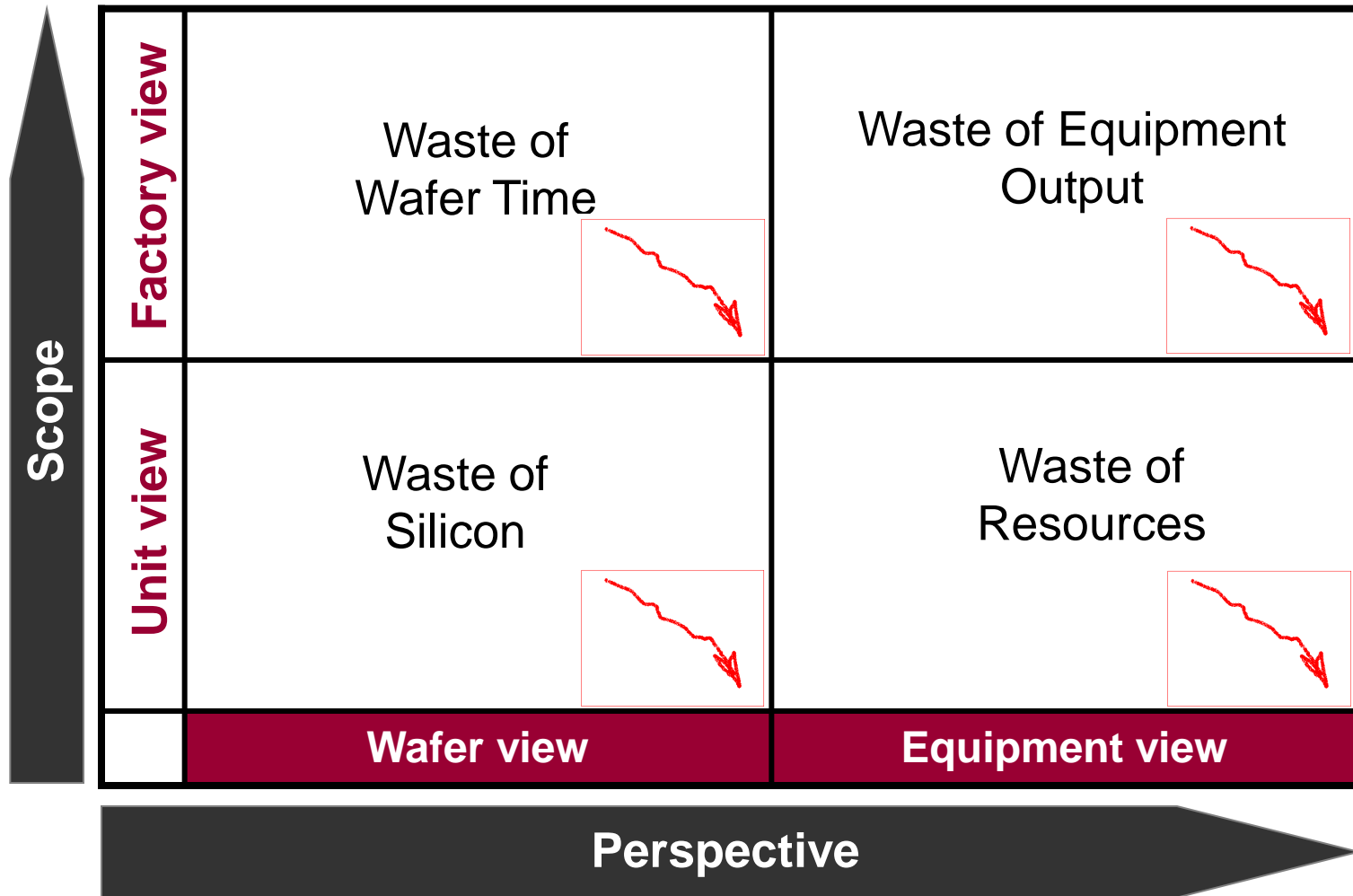
**Minimize
 Waste**



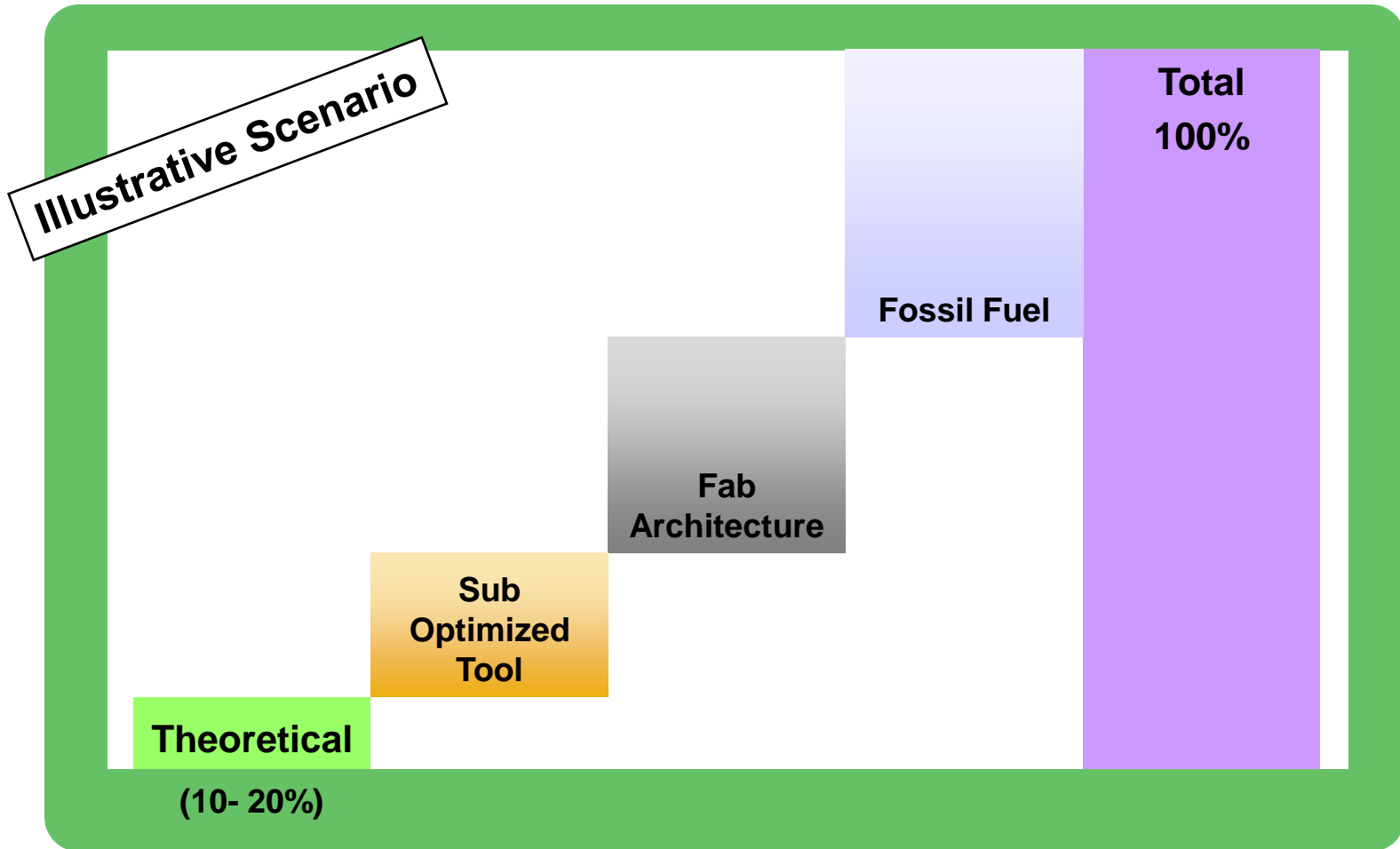
Fab Productivity Redefined

Eradicate Waste
through
Agility and Sustainability

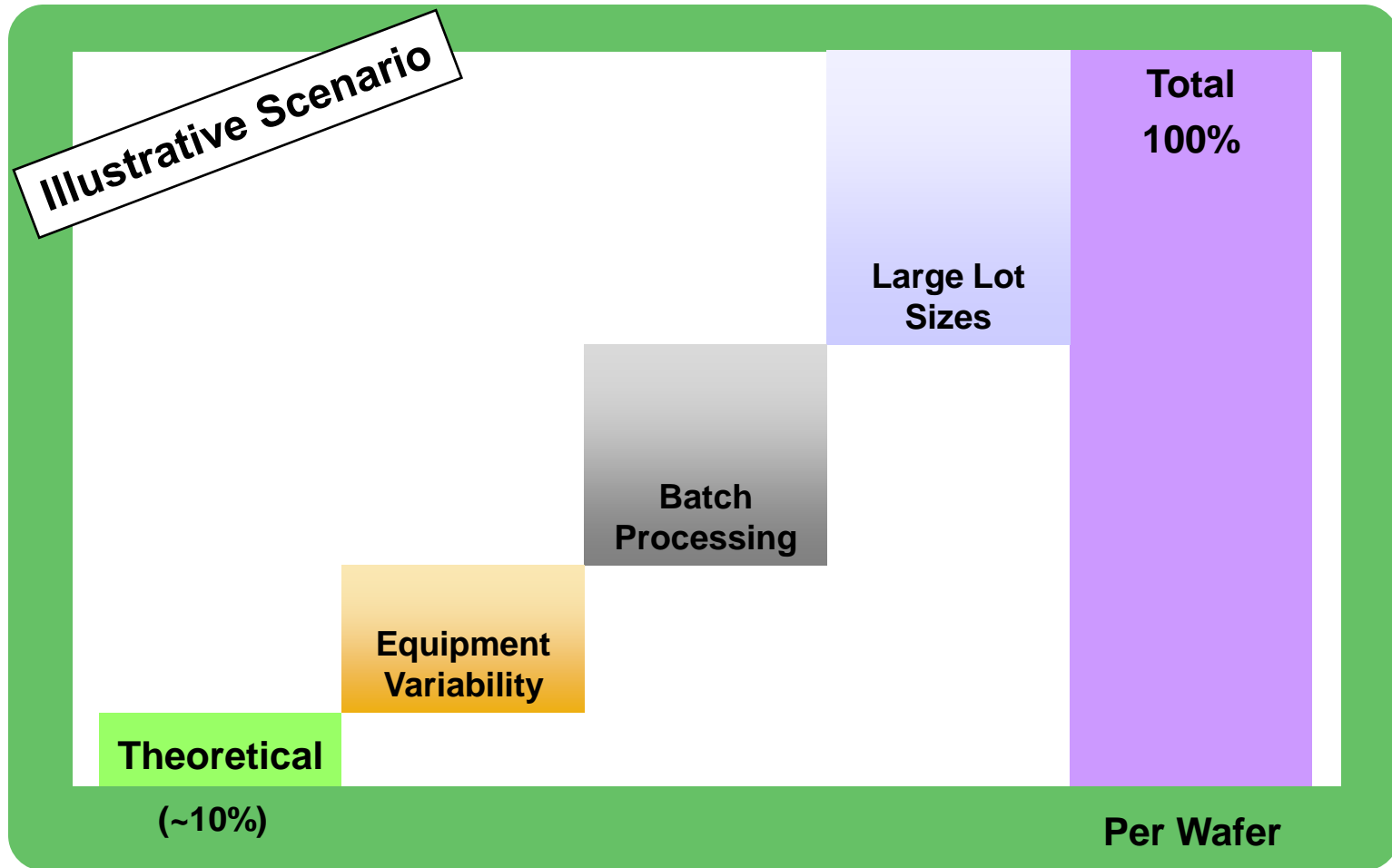
Reducing Waste



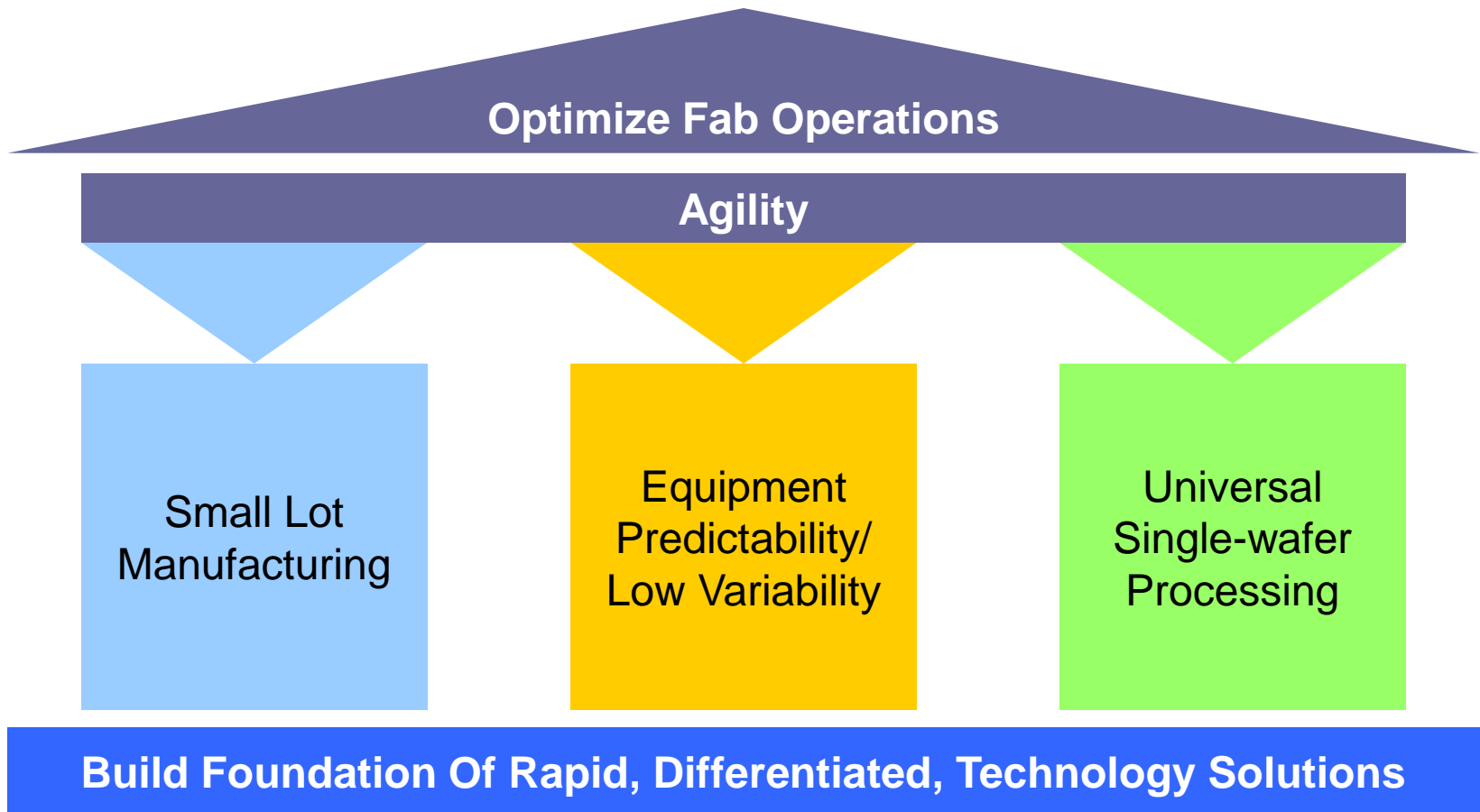
Fab Carbon Footprint Contributors



Wafer Cycle Time Contributors



Optimizing Fab Performance with Agility



Realizing Vision will not be Easy

*We need to
roadmap and prioritize
agility and sustainability
– just like scaling*



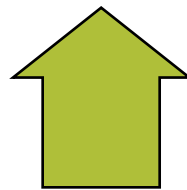
- ❑ Lag time to results

Fab Productivity Redefined

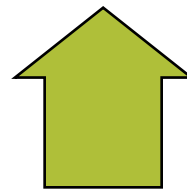
$$\text{Productivity} = \frac{\text{Output}}{\text{Input}}$$

**Maximize
Output**

**Minimize
Waste**



Scaling



Throughput

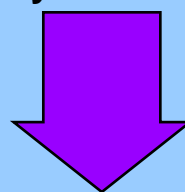


Performance



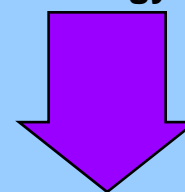
Yield

Cycle Time



-50%

Energy



-50%