

The AI Knowledge Factory: The NEXT Efficient Economic Engine

Perception

AI Data Centers are...

Power-hungry

Strain the grid

Hyped, unsustainable growth



Perspective

AI can...

Enable a **knowledge factory** that enhances the performance of all sectors

Boost GDP by **\$2.6-\$15.7T**

Efficiently grow that GDP **~3x**



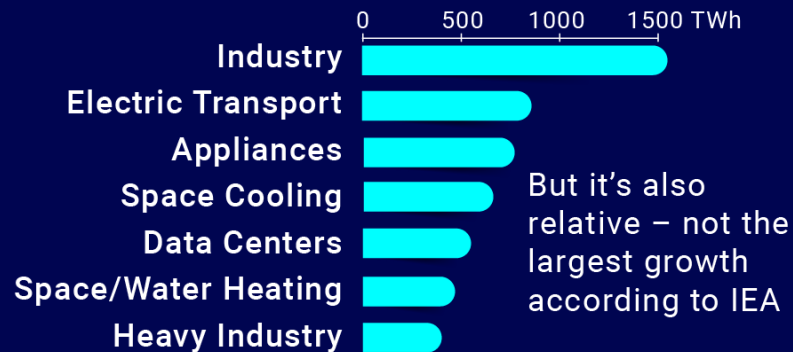
Globally, AI is Driving Increased Electricity Consumption

Consumption to double by 2030 from **415TWh** to **945 TWh**.²

+530 TWh

That's **530 TWh** of NEW electricity consumption, but with new advances in chip performance, increased utilization could result in even higher growth.

Increase in Electricity Demand 2024-2030³



But it's also relative – not the largest growth according to IEA

But that Consumption is Expected to EFFICIENTLY Grow GDP

Current global efficiency **\$4/kWh**



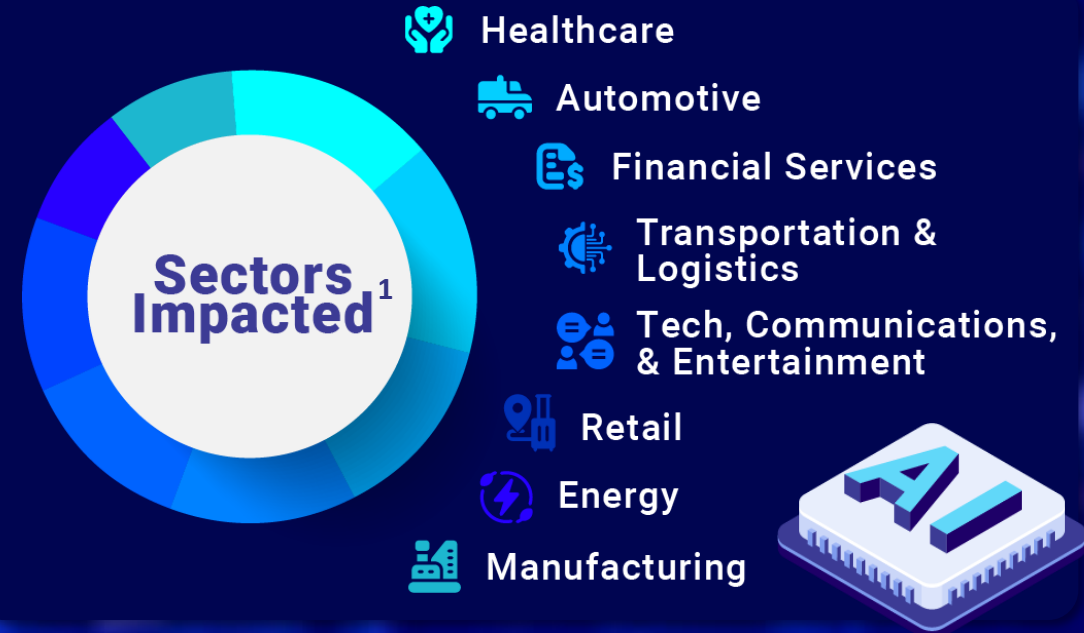
+\$2.6-\$15.7⁵
Trillion

AI forecasted to add **\$2.6-\$15.7T** GDP by 2030

At **530TWh** consumption, that's **\$5-\$30/kWh**

At midpoint of range that's **3x additional economic value per kWh**

~3x



Sources: 1. [PwC](#) (sector list not exhaustive), 2. [IEA](#), 3. [IEA](#) 4. [EIA](#), 5. [McKinsey](#)