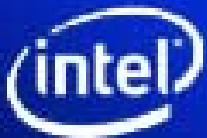


Climate Leaders – Intel Update

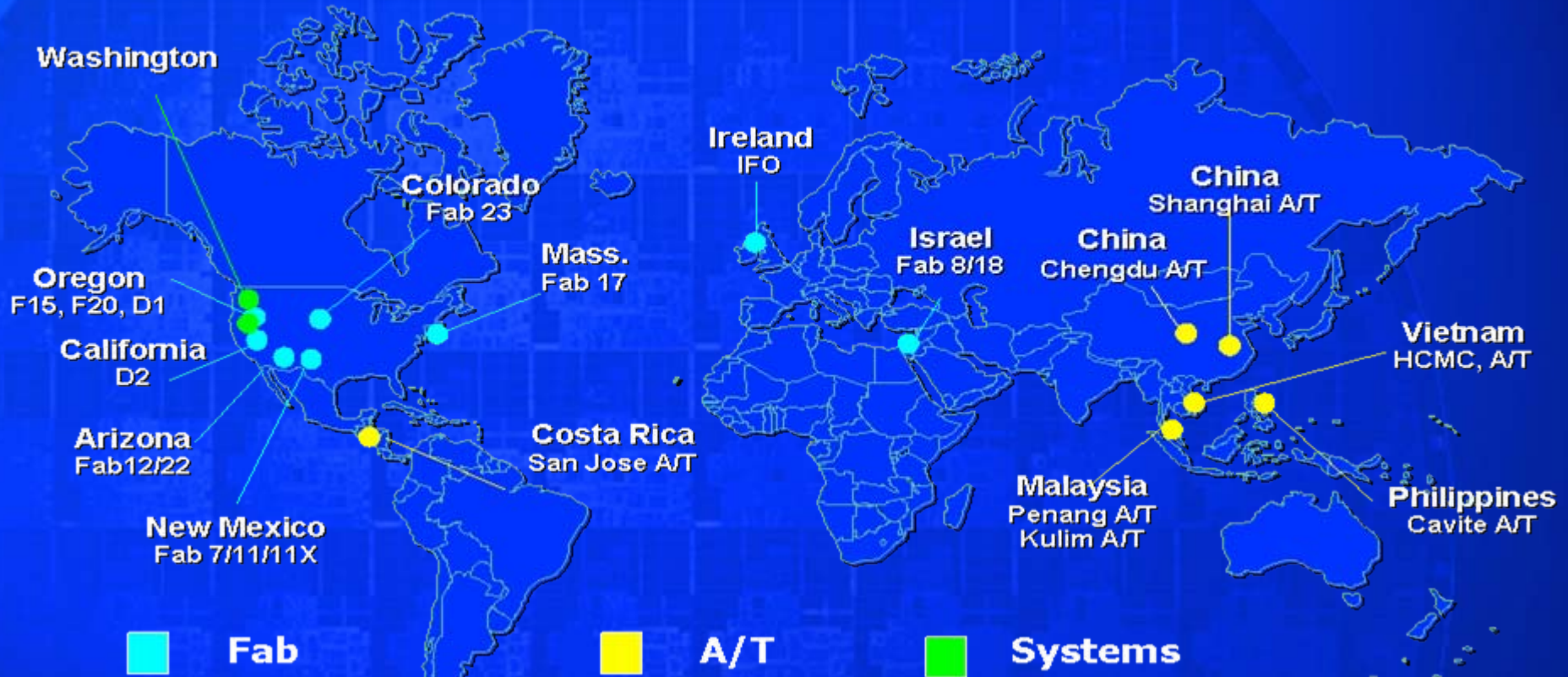
Tim Higgs
Intel Corporation
Annual Climate Leaders Meeting
October 2008

Intel Background

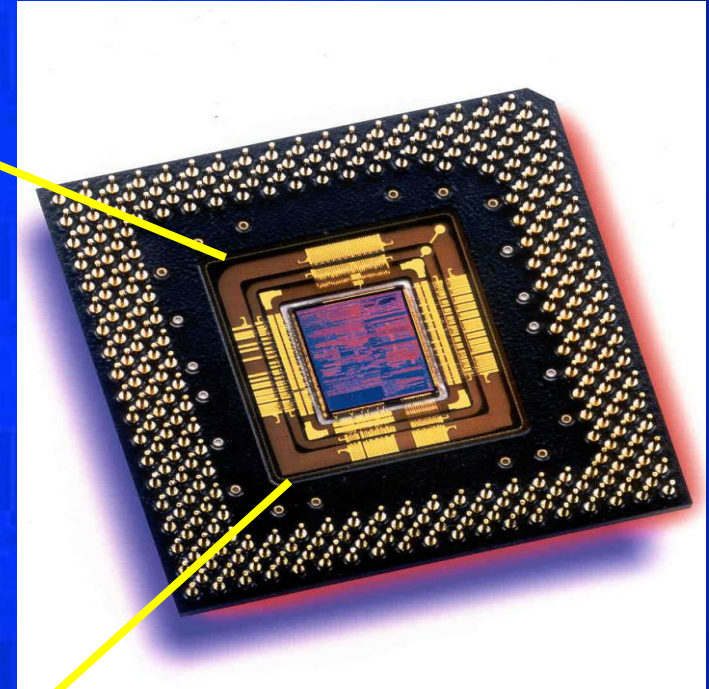
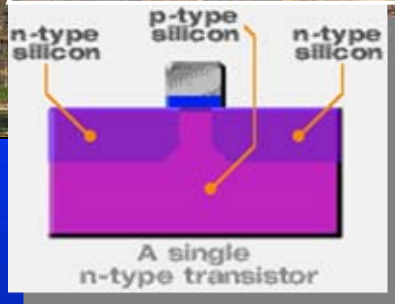
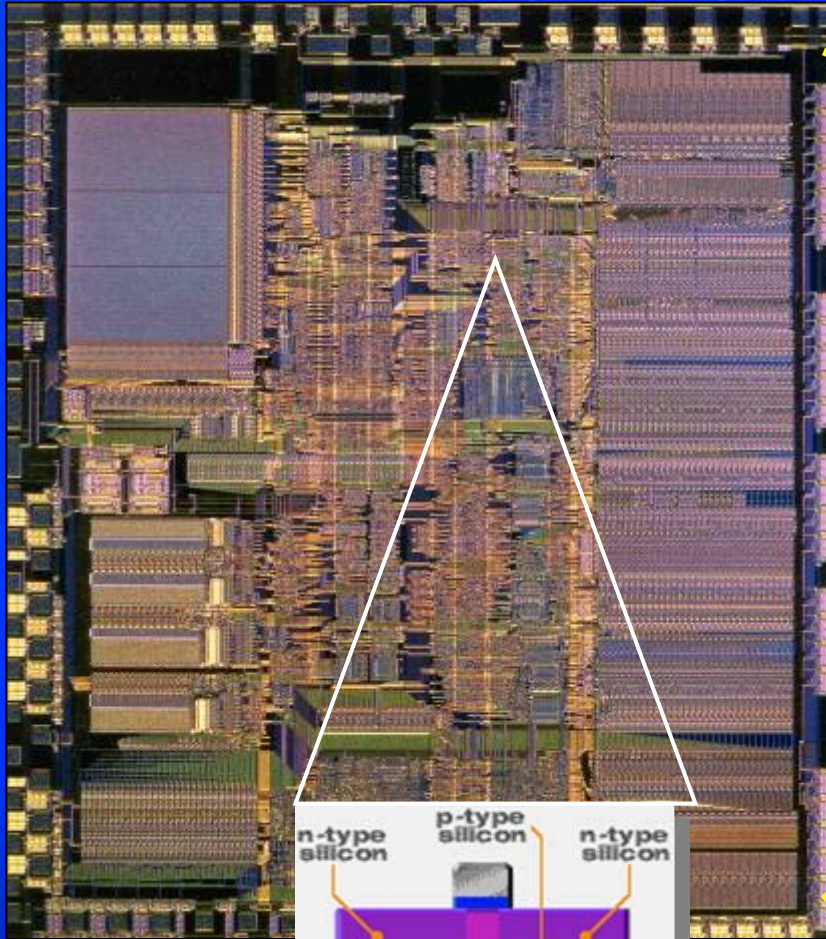
- Year founded: 1968
- World's largest semiconductor manufacturer
- Number of employees: ~85K
- 2007 Revenues: \$38 Billion
- 294 offices/facilities in 48 countries



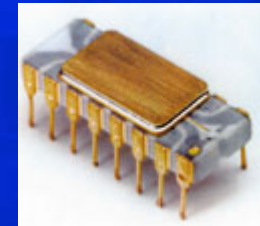
Intel's Manufacturing Sites



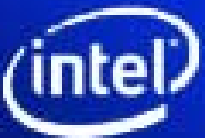
The Microprocessor (The "Brains" of a Computer)



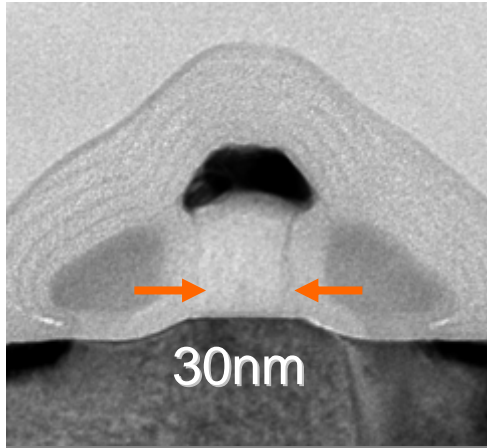
410 Million Transistors



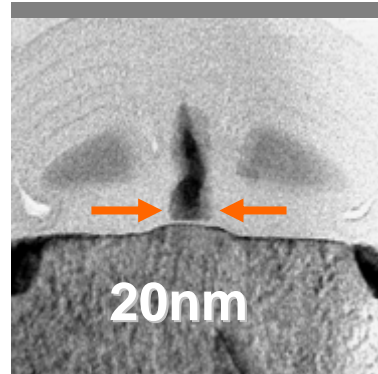
4004 microprocessor, 1971
2300 Transistors



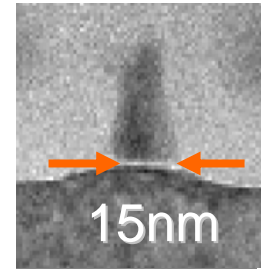
The Incredible Shrinking Transistor



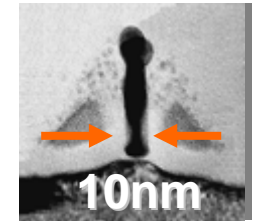
**65nm process
2005 production**



**45nm process
2007 production**

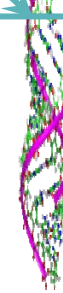


**32nm process
2009 production**

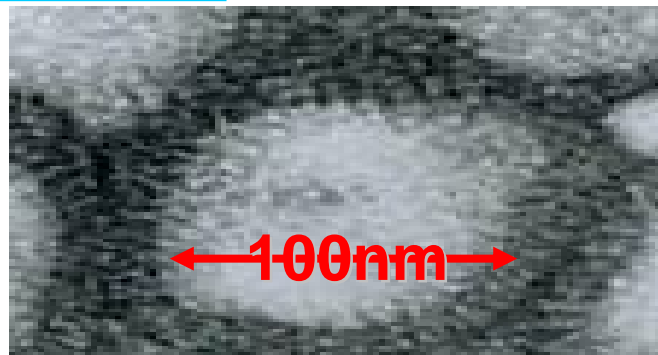


**22nm process
2011 production**

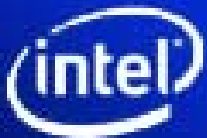
DNA is 15 nm wide



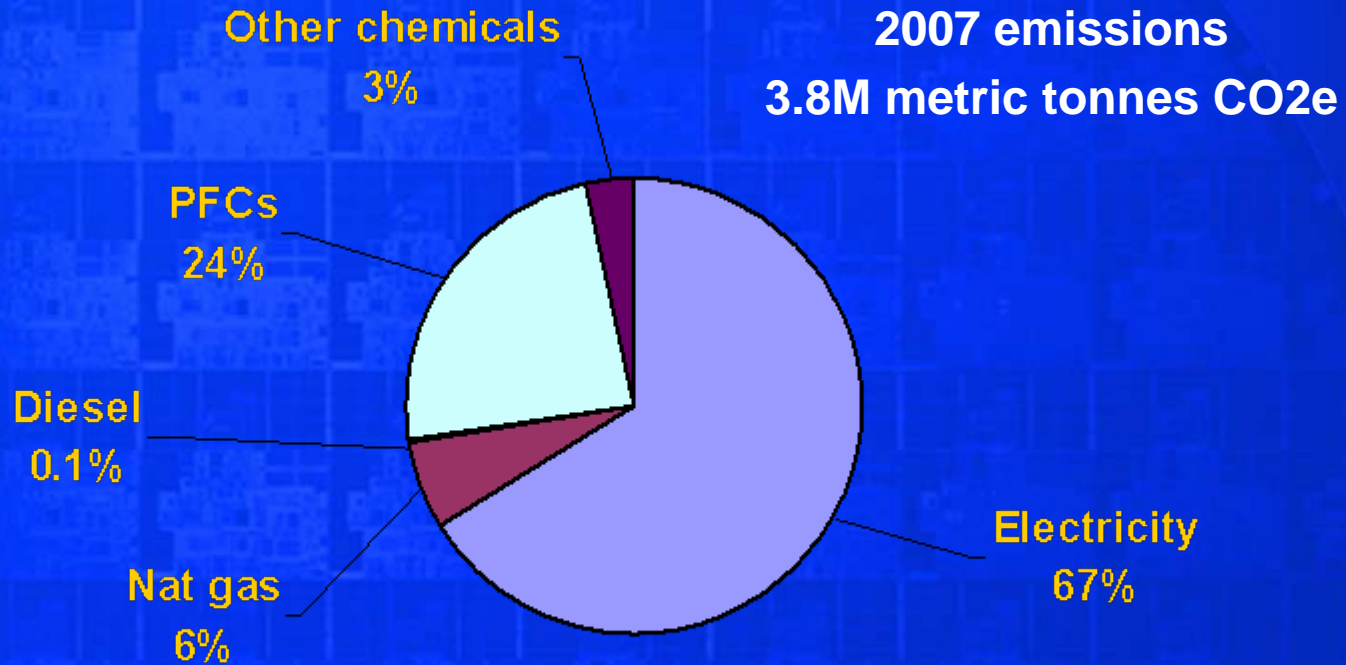
nm = nanometer (1 billionth of a meter)



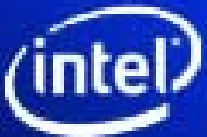
Influenza virus



Intel & Climate Leaders



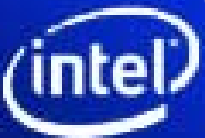
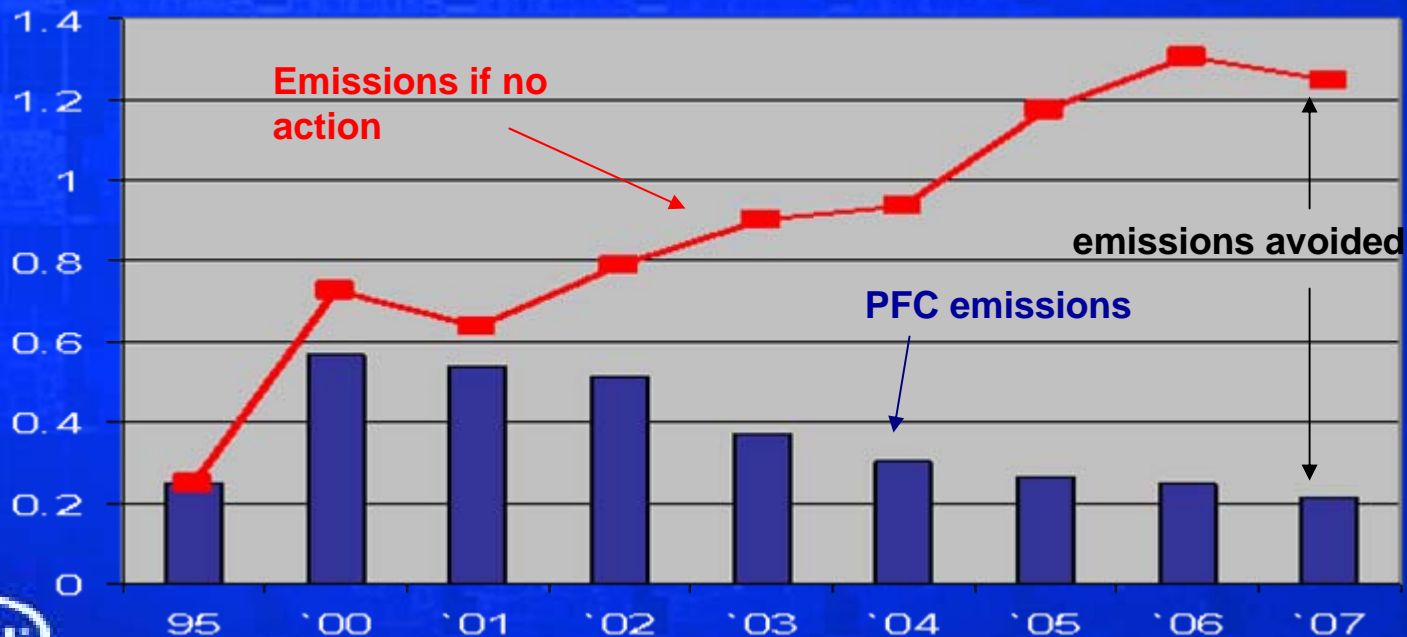
Goal: Reduce GHG emissions 30% per production unit from 2004 through 2010



Perfluorocompounds (PFCs)

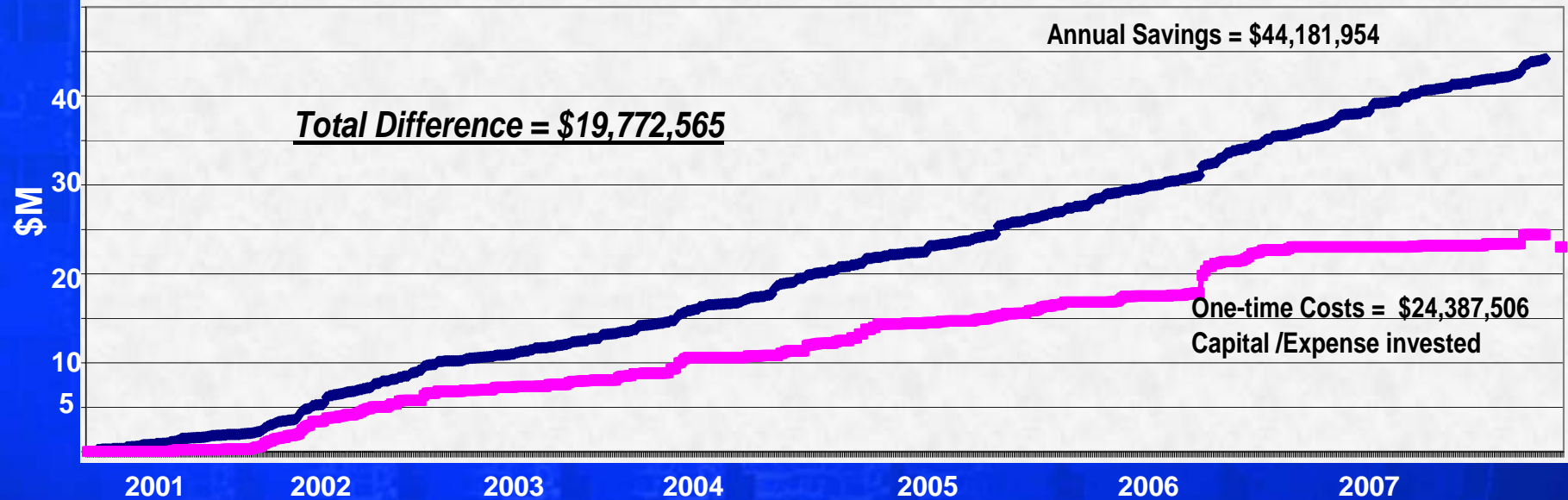
- Semiconductor manufacturing uses PFCs
 - High GWPs: 5,000 -20,000+
- Worldwide industry agreement signed in 1998 to reduce PFCs to 10% below 1995 levels by 2010
 - Believed to be world's first voluntary GHG reduction agreement

Intel PFC Emissions '95 - '07



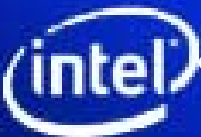
Energy Conservation

Worldwide Cumulative Dollars Saved vs Invested



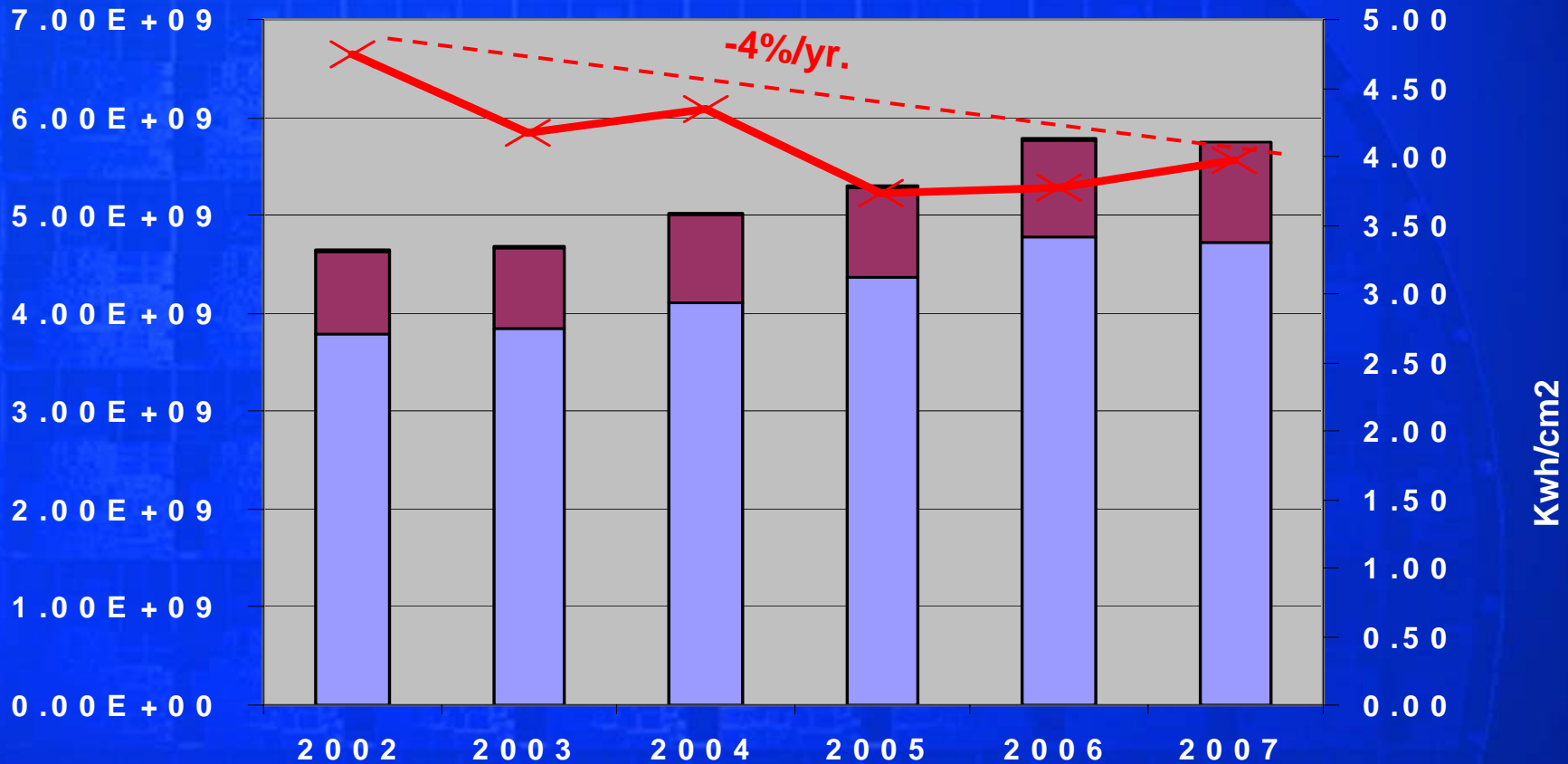
Intel has a dedicated fund for energy conservation projects

- Since 2001, approximately \$20M has been spent on conservation
- These projects are now saving \$44M per year



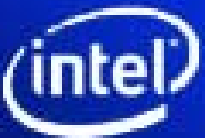
Energy Use

Electricity Natural gas Diesel kWh/cm²

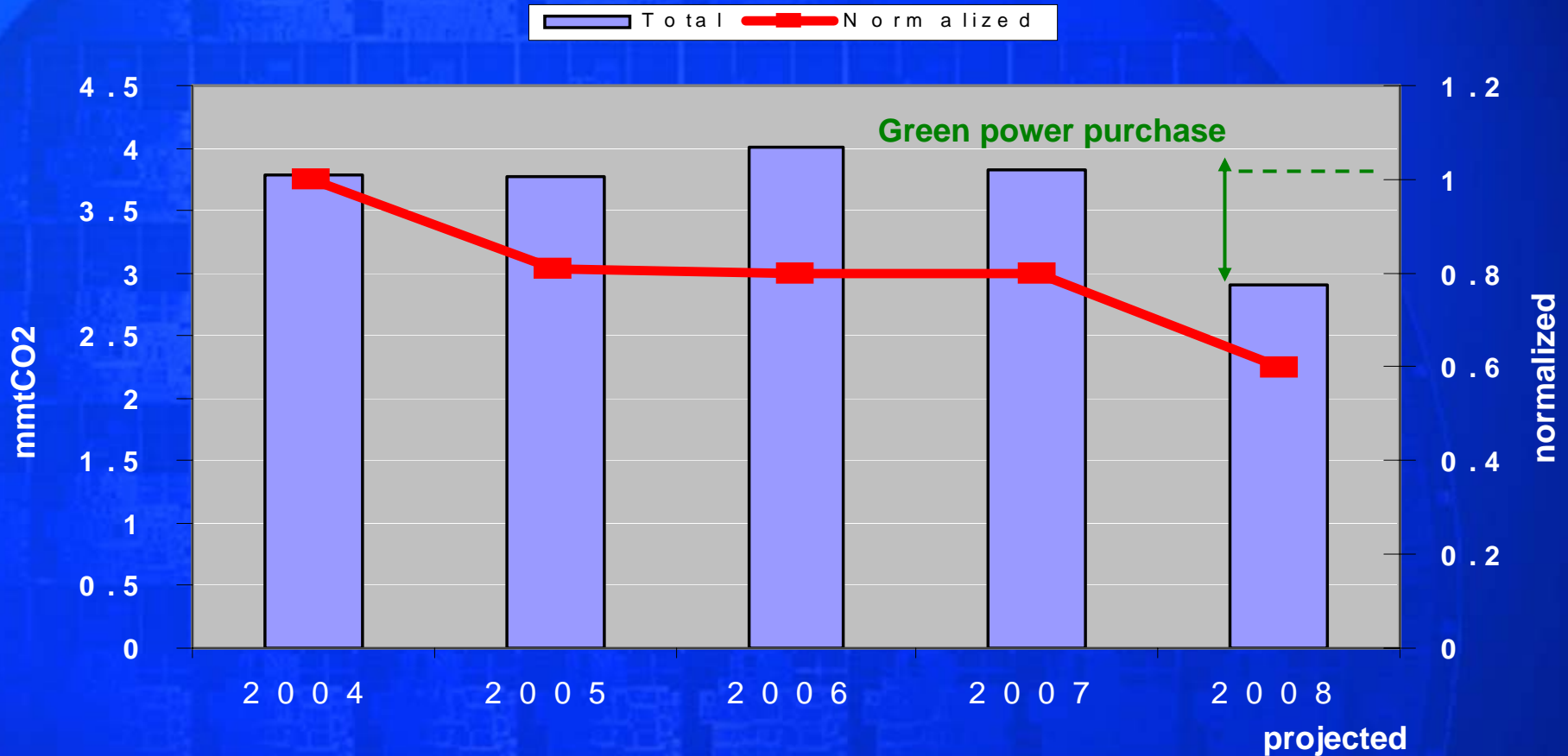


Public goal to reduce normalized energy consumption 4% per year from '02 - '10

- On track through 2007



C02 Reduction Results



Normalized emissions reduced 20% so far

2008 absolute emissions ~20% below 2007

Purchasing 1.3B kWhrs of green power beginning in 2008



Ongoing & Future Activities

- Israel design center becomes first Intel LEED certified building, 2008
- Pursuing LEED certification of manufacturing fab in AZ
 - Evaluating for additional facilities
- Continuing efforts on energy conservation
 - Working with industry to influence manufacturing tool suppliers
- 2 on site solar hot water projects to be complete in 2008
 - Plan to implement broadly across Intel over next several years
 - 1 on site PV project as well

