



# A Sustainability Journey

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Program

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# Intel in Oregon

Acquired first Oregon property in 1974

Capital investments since >\$25B

Adding 2 new 1.1M sq ft plants through 2014

State's largest private employer with ~17,000 employees

2012 payroll: \$2.2B

Every Intel job creates an additional 3.1 jobs

Donations in Oregon for 2012: \$7.3M

# A Core Intel Value...

## Two Found New Firm

MOUNTAIN VIEW — Two founders of Fairchild Semiconductor Division signed last month a new integrated electronics company.

The firm, Inc., leased part of Middlefield Road, occupied by Union, integrated circuitry of the firm's moved to San

Founders Drs. Robert Gordon E. Moore among eight Fairchild Semiconductor than 10 years to build it into a producer of integrated



“It's no longer enough to just produce a profit. Instead, we need to continually improve our manufacturing process, thereby reducing our burden on the environment and becoming an asset to the communities in which we live and work”.

Gordon Moore, Intel Chairman  
Letter in EHS Report, January 1995



# Sustainability: Evolution Model\*

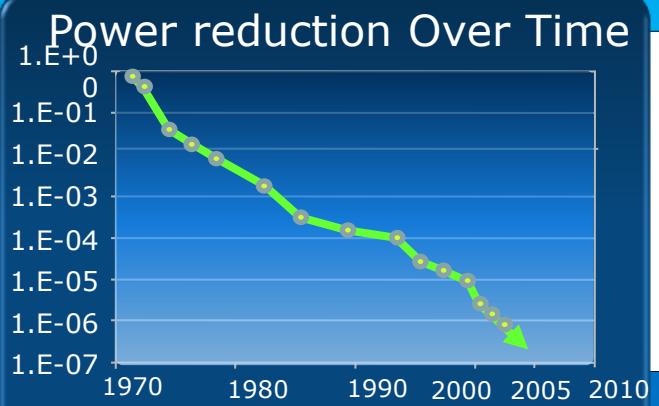


## 1. Do No Harm

## 2. Do Well by Doing Good



## 3. Grow the Top Line



\*As verbalized by Joel Makower, Greener World Media at Ceres 2010



# Operations

## Ahead of the Curve

## Transparency and Disclosure

## Continuous Company-Wide Improvement

1994

1996

1998

2000

2003

2006

2007

2008

2009

2010

2013

Public environmental reporting starts

Public reporting of Total Energy Use

First Global Sector-wide Climate Change Goal

Public Reporting of Climate Footprint

Global Energy Conservation Goal

Global Climate Footprint Goal

Climate Savers Computing Initiative

Largest U.S. Green Power Purchaser

Intel Open Energy Initiative

Solar Projects

LEED Buildings

Conflict-free micro processor



*Why our industry is different*  
What If You Applied Moore's Law  
To The Auto Industry...

1971 – 81 MPH  
2012 – 324,000 MPH

Speed Increase

1971 – 26 MPG  
2012 – 130,000 MPG

Energy Efficiency

1971 – \$2,500.00  
2012 – \$0.05

\$230  
Cost



Intel Confidential



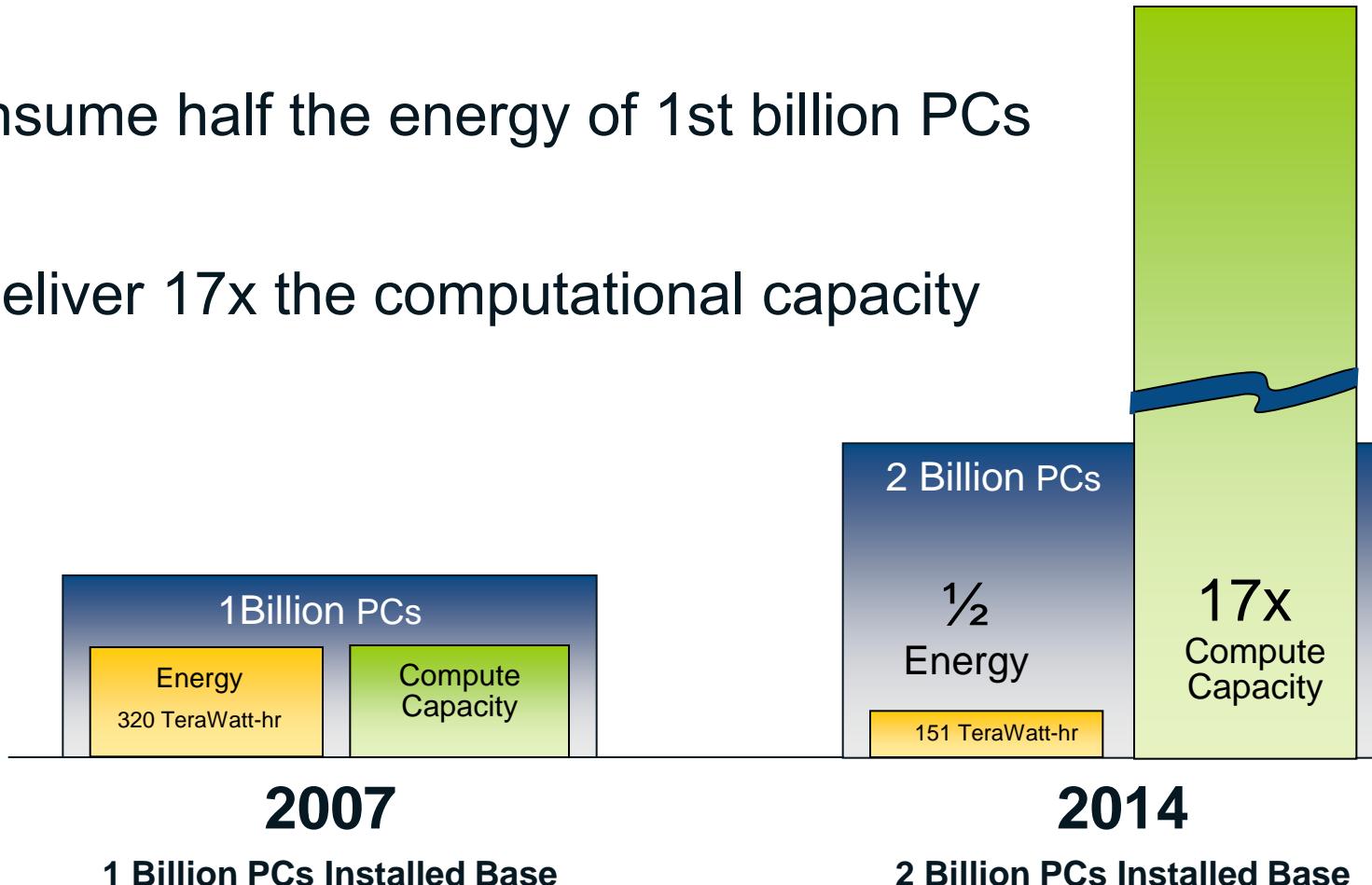
Source: Volkswagen 1971 Super Beetle Brochure

# COMPARED TO THE FIRST BILLION PCs

## THE 2 BILLION IN 2014 WILL...

...consume half the energy of 1st billion PCs

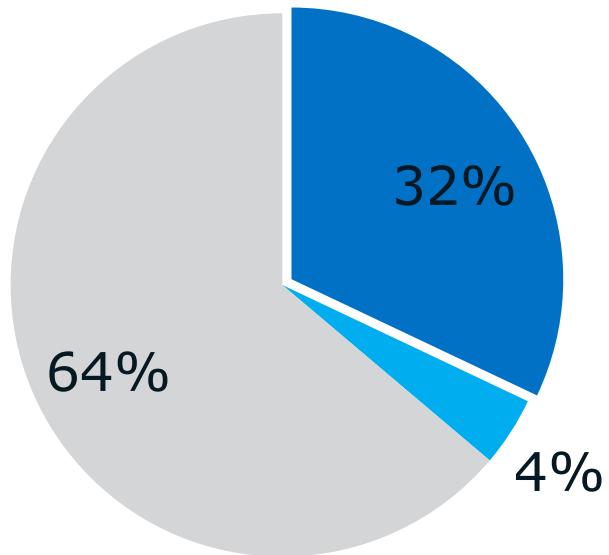
...deliver 17x the computational capacity



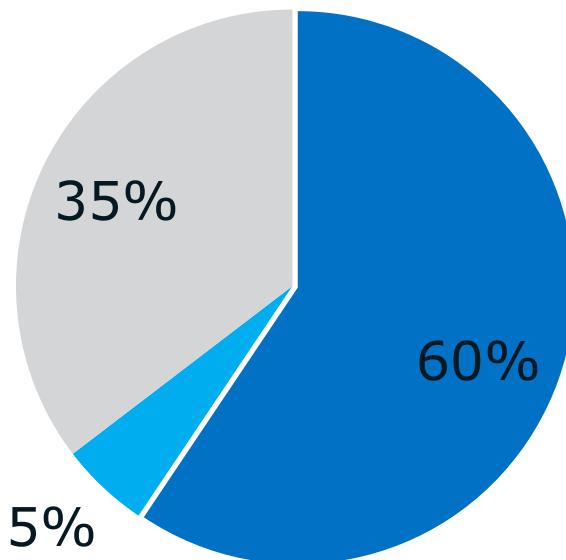
Source: Intel Microprocessor Marketing and Business Planning, and Intel iAG/PCCA Power Initiative team, PBCA-PPM

# Practical Example

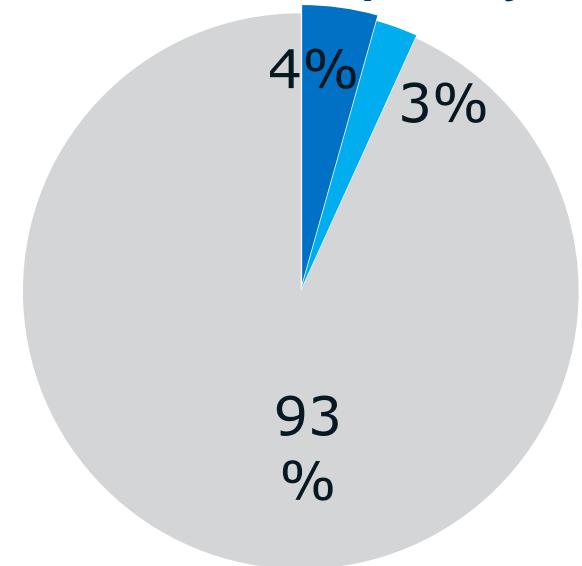
Age Distribution



Energy Consumption



Performance Capability



**Old Server population consumed 60% of the energy,  
delivered only 4% Relative Performance Capability**

# Technology and the Environment

Drive Computing to  
Be More  
Energy Efficient

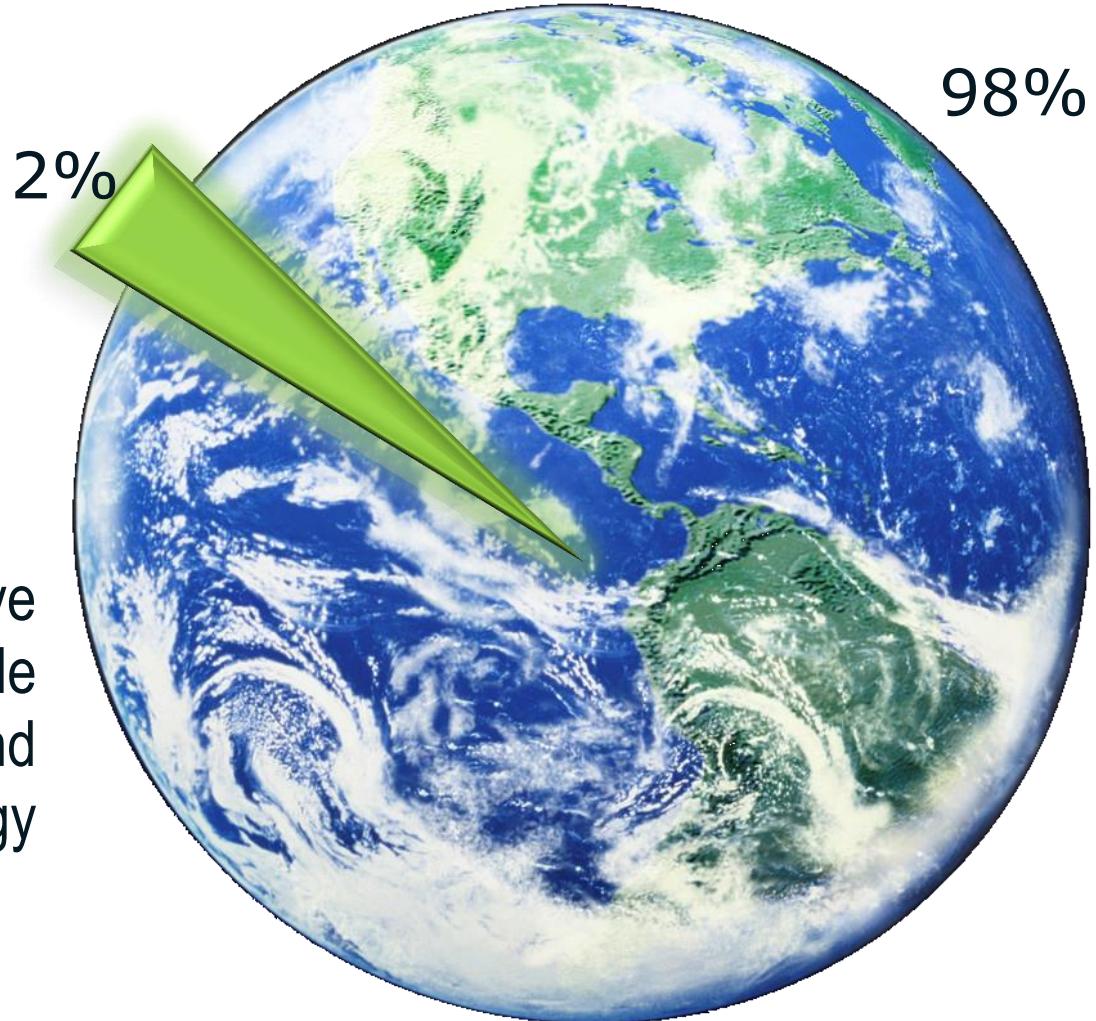
~2%

**Opportunity**

Use Computing to Improve  
Energy Savings Outside  
Information and  
Communications Technology

98%

**The Big Opportunity**



**And this is just CO2 emissions**

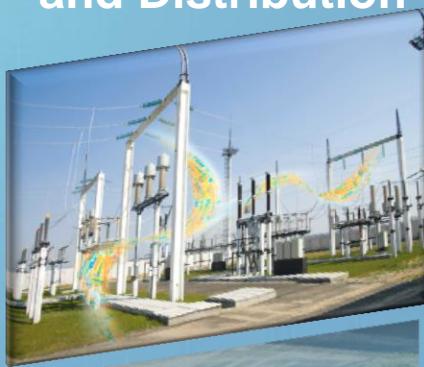


# A Smarter Grid

## Smarter Generation



## Smarter Transmission and Distribution



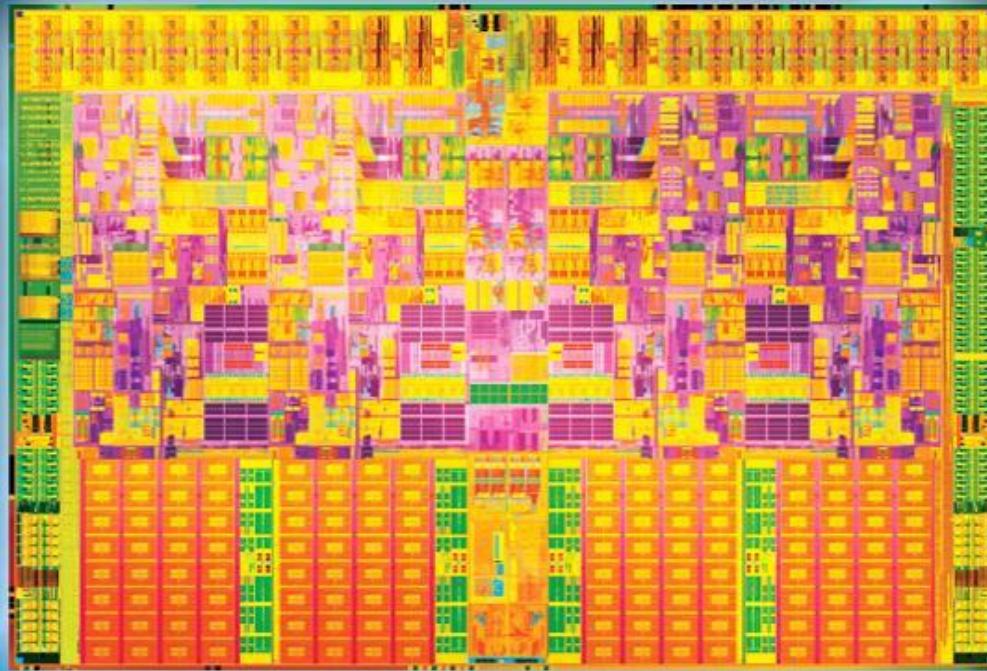
## Smarter Demand-Side Management



**Holistic End to End Approach to Grid: Intelligence, Connectivity, Security**



# Less Power, More Powerful



Critical Ingredient to a Low-Carbon, Smart Society

