

Xerox's GHG Reduction Initiative

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Xerox Corporation
October 12, 2006



Be energy **smart** today
to **preserve** tomorrow

Xerox's GHG Reduction Initiative

- *About Xerox*
- Why did Xerox commit to reduce greenhouse gas emissions?
- How did we get started?
- What is our approach to reaching our goal?

Xerox at a glance

- \$16 billion business
- 55,000 employees worldwide
- Customer operations on six continents, 160 countries
- Headquarters: Stamford, Connecticut
- www.xerox.com
- NYSE: xrx



North America

Developing Markets

Fuji Xerox (Joint Venture)

Europe

Canada
United States

Africa
Eastern Europe
Latin America
Middle East, South Asia
Russia

Asia Pacific
Australia
New Zealand

Austria
Belgium
Denmark
Finland
France

Germany
Greece
Holland
Italy
Norway

Portugal
Spain
Sweden
Switzerland
UK

Xerox offers the document industry's broadest portfolio of offerings

High-end printing and publishing

The New Business of Printing™

- Monochrome production systems from 65 to 180 impressions per minute and color production systems from 40 to 110 pages per minute (“ppm”).
- Digital printing as a complement to traditional offset printing.

Value added services:

- Software and workflow solutions
- Document management services

Office:

Leading the transition to color

- Digital multifunctional devices (“MFDs”) (which can print, copy, scan and fax)
- Digital copiers
- Laser and solid ink printers, fax machines

Supplies:

- Toner, paper and ink



Xerox's commitment to reduce greenhouse gas emissions

Goal: Reduce total company-wide GHG emissions 10% lower than 2002 levels, by 2012

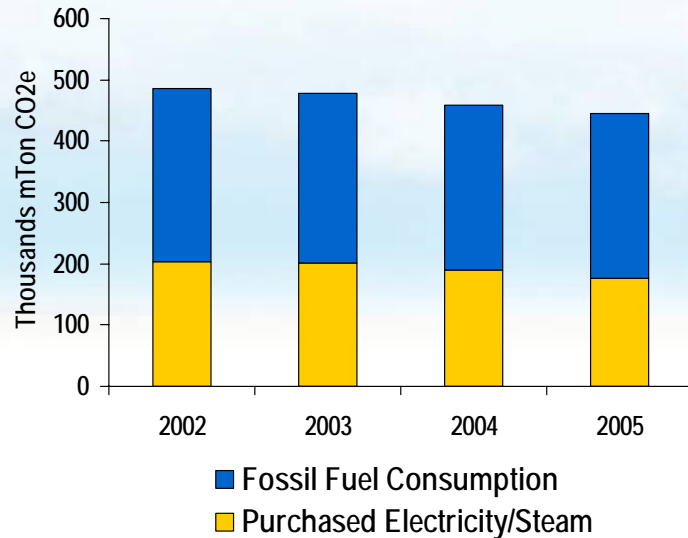
- We've named our internal program **Energy Challenge 2012** because nearly all of Xerox's GHG emissions are linked to our use of energy.
- To reach goal, expect to achieve 30% improvement in energy efficiency.

**Energy
Challenge
2012**

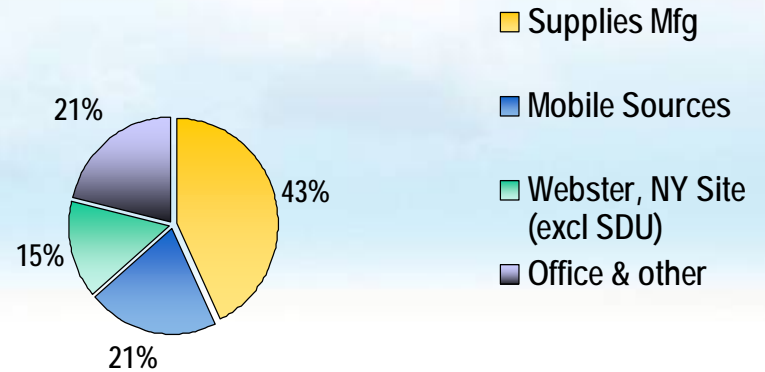
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Progress is encouraging to date – emissions down > 7% since 2002

Xerox Greenhouse Gas Emissions



Distribution of Emissions by Operation



- Reductions due to:
 - Fewer miles driven by service fleet due to greater reliability, remote service, longer live parts.
 - New technologies and energy efficiency projects.
 - Reduced mfg output.

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Environmental commitment is inherent in Xerox core values

“To us, *sustainable development* is a race with no finish line. It requires *leadership* that sets high expectations and clear direction, and *innovation* that constantly pushes the frontier of what is possible”.



Anne Mulcahy
Chairman & CEO

Xerox values

- We succeed through satisfied customers.
- We deliver quality and excellence in all we do.
- We require premium return on assets.
- We use technology to develop market leadership.
- We value and empower our employees.
- We behave responsibly as a corporate citizen.

Xerox's commitment builds on long-standing efforts in sustainable product design

Product Energy Efficiency

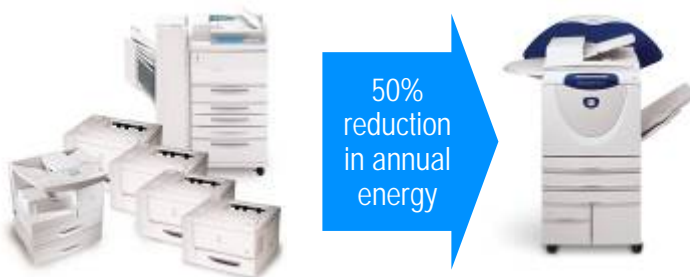
Xerox Energy Star products and parts reuse enable 600,000 tons of avoided CO₂ emissions annually



Enough to light >1.0 million US homes for a year

Multifunction Systems

Reducing energy, raw materials, paper use

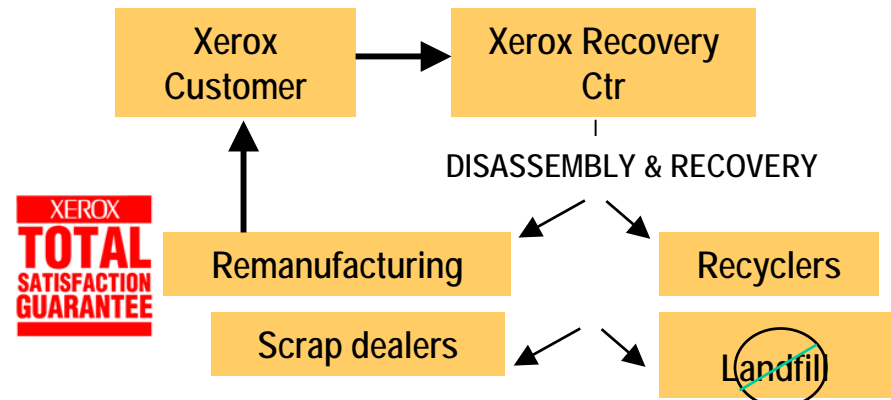


50% reduction in annual energy

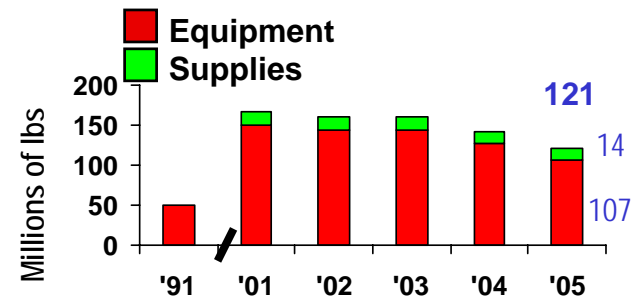
1422 kWh

706 kWh

Remanufacture, Reuse and Recycle



Waste Diverted from Landfills



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Xerox's GHG reduction program developed over three years

Program Mgmt

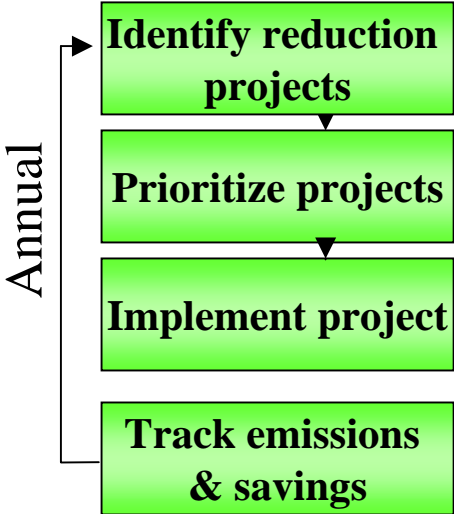
- Joined Climate Leaders
- Defined inventory boundaries
- Measured GHG emissions company-wide
- Set reduction target
- Developed Management Process & IMP
- Carbon Disclosure Submission
- Launched Energy Challenge 2012
- Deployed Energy /GHG Data Web Tool
- Joined CA Climate Action Registry

2003-2004 Activity

2005 Milestones

2006 Milestones

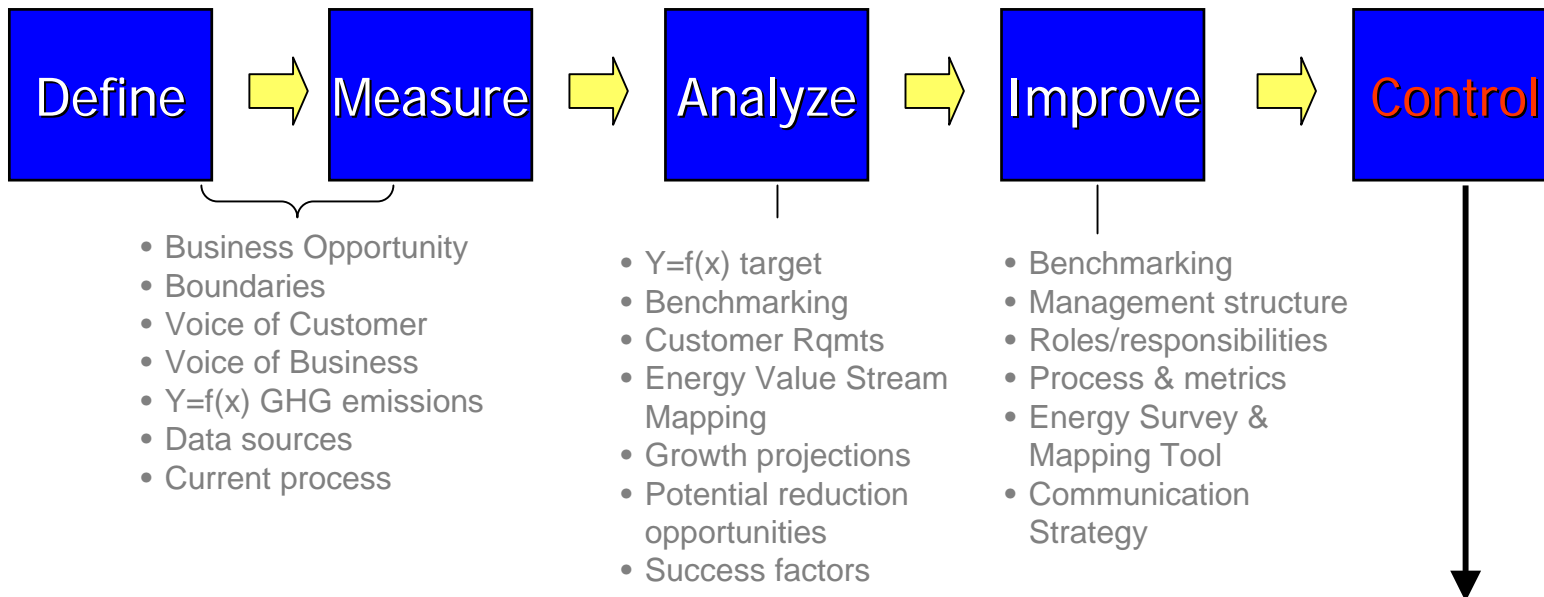
Operations



Energy Challenge 2012

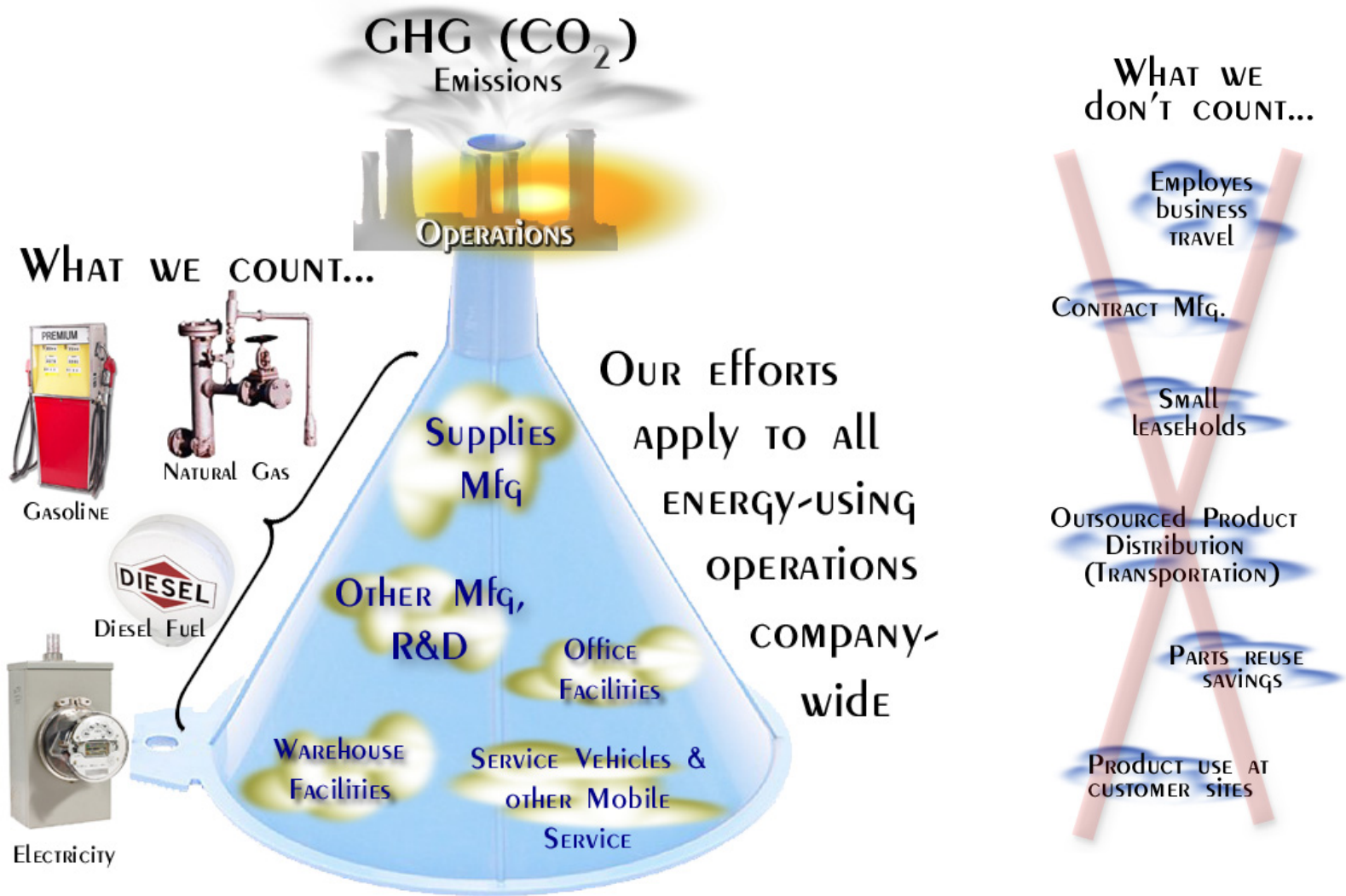
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LSS methodology was used to develop reduction target, management and data collection process

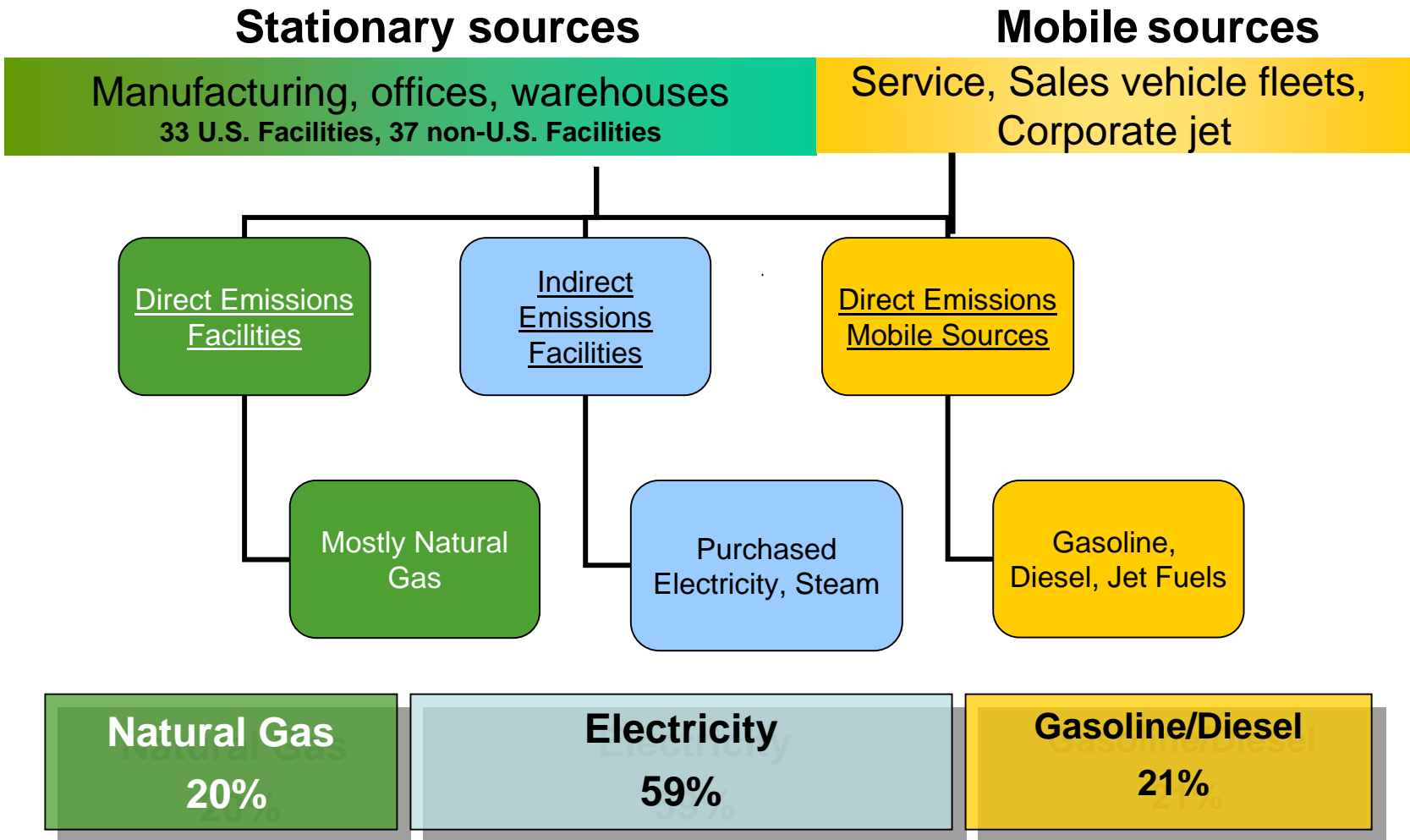


- Launch Energy Challenge 2012 (communication strategy & umbrella program)
- Pilot management process
- Develop roadmap for future reductions to achieve our goal
- Pilot tools to support Energy & GHG reduction process
- Best practice sharing
- FMEA

Energy Challenge 2012 covers energy-using operations within Xerox's direct control



The GHG Protocol and Climate Leaders guidance were followed in defining boundaries of Xerox's GHG inventory

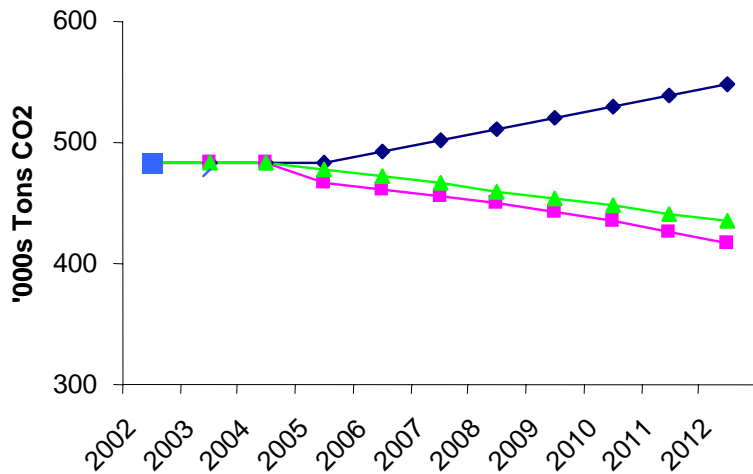


Set reduction target based on projected energy demand and potential for reduction

Estimated Energy Demand and associated CO₂ emissions without energy savings initiatives



Estimated thousands of tons CO₂e to be saved annually by 2012 in project areas



■ Technology /Manufacturing Operations

■ Facility/Site Efficiencies: (infrastructure, equipment efficiencies)

■ Service vehicle productivity (fleet)

■ Clean energy potential

Concluded 10% absolute reduction would be challenging but feasible

Identified fundamental program elements to enable success

Successful Energy Challenge program

Leadership commitment

- High level direction
- Resources enabled

Clear roles & accountability

- Defined success metrics
- Stretch targets

Full value chain engagement & support at all levels

- Leadership
- Communication of value

Integration into core business strategies & processes

- Working team efforts
- Consideration in investment decisions

Appropriate funding / investment

- Leadership
- Sound business case
- Long term view

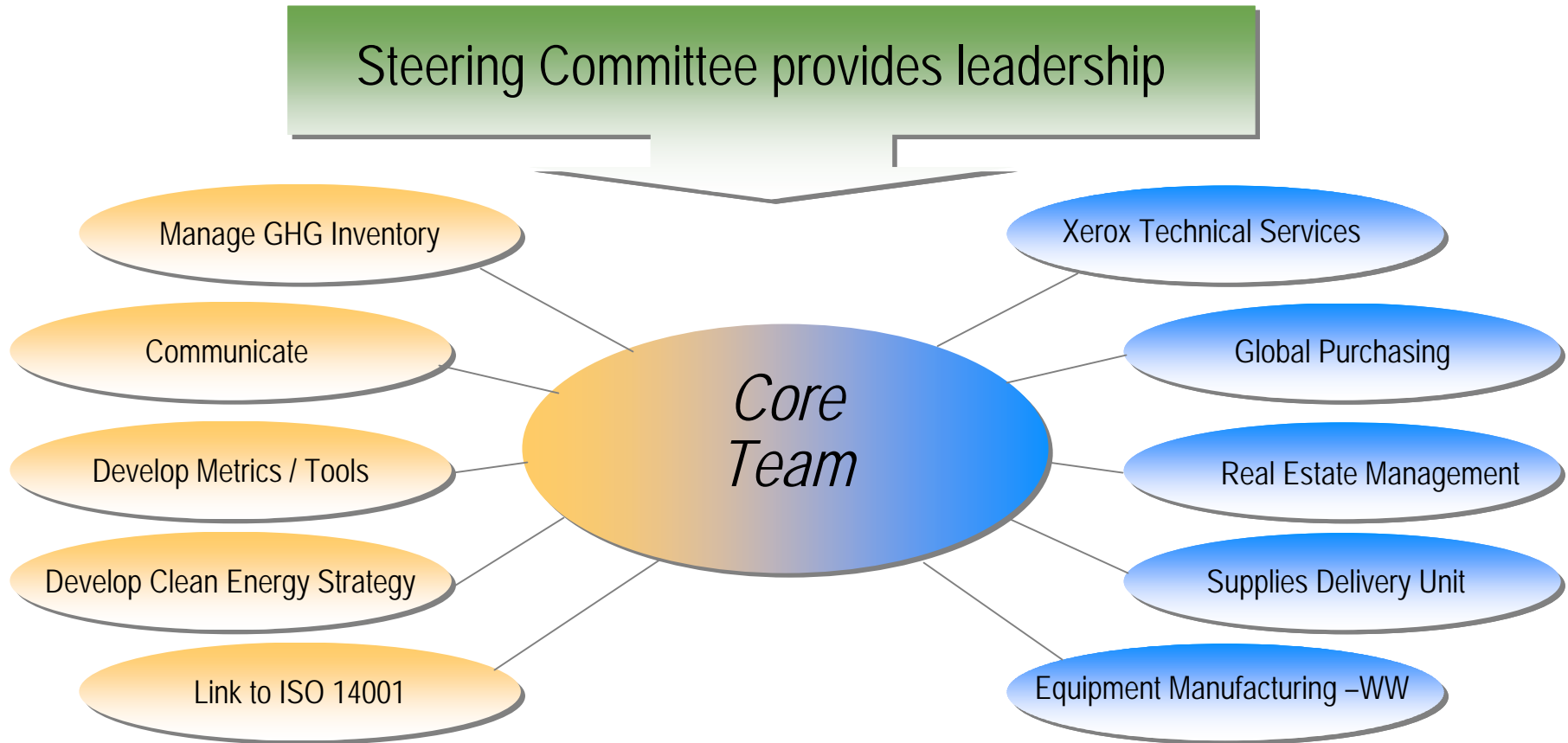
Successes rewarded & communicated

- Clear success metrics
- Effective communication
- R&R strategy

Strong program management

- Leadership
- Clear accountability

Established management structure to ensure full value chain engagement and support



EH&S provides leadership and guidance

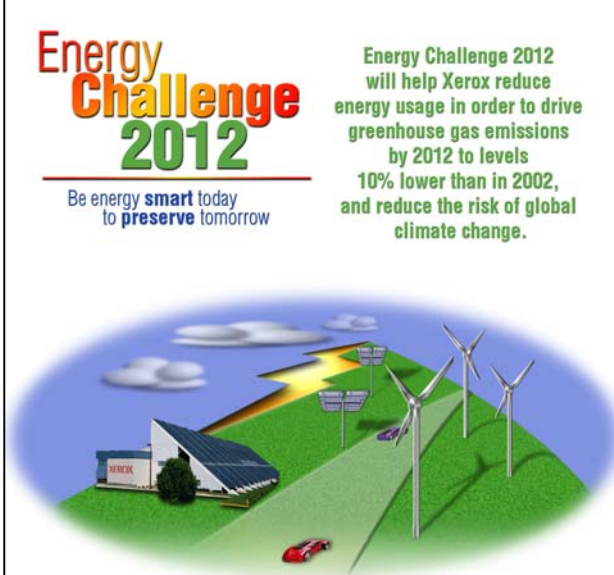
Business teams execute to get results!

Over 50 employees directly involved

Developed communication program to build internal awareness and support

Communication program gives the program an identity and encourages all employees to take action:

- Company webboards – worldwide
- Interactive web site allows energy savings tip
- Management communiqués
- Newsletters & Posters



The poster features a central illustration of a green landscape with a Xerox building, a red car, and several wind turbines. A large yellow lightning bolt strikes the ground near the building. The sky is blue with white clouds.

Energy Challenge 2012

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Energy Challenge 2012 will help Xerox reduce energy usage in order to drive greenhouse gas emissions by 2012 to levels 10% lower than in 2002, and reduce the risk of global climate change.

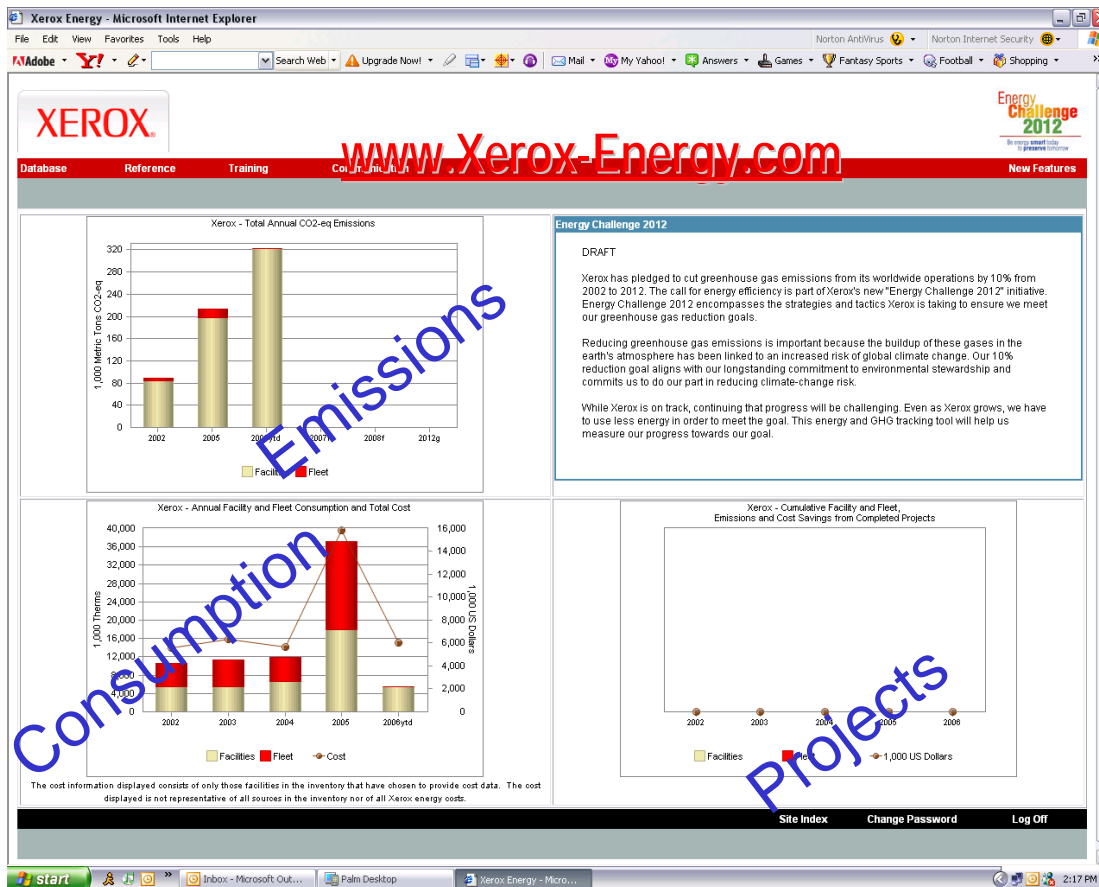
Find new ways to save energy.

- Support the efforts of your local energy teams and look for opportunities to streamline processes.
- Follow approved power-down procedures to ensure that process equipment, lights and electronics are only used when needed.
- Keep dock doors and man-doors closed to prevent loss of heated or air-conditioned air.
- Follow approved procedures for preventive maintenance of energy-using equipment like motors and compressors.
- Share other energy saving opportunities with co-workers and management.

Aliso Viejo Operations / Contact: 949.386.0000 (Outside Office Hours) 922.4.017
Maricopa Operations / Production Systems Manufacturing 922.5.032
Grand Central Office Group - Worldwide 917.9.3933

XEROX
Technology | Document Management | Consulting Services

Implemented a company-wide process for collecting and retaining high-quality and verifiable energy data for use in GHG inventory



- PWI-Energy provided solution.
- Full implementation year end.
- User feedback positive. - "Easy to use"

Xerox joined California Climate Action Registry in 2006

- **Xerox Goal:** Register 2005 year emissions with a credible external certification program (and yearly thereafter).
- **Benefit:** Verified public reporting of GHG emissions to gain transparency with stakeholders and prepare for potential future legislation or opportunities to trade carbon credits.



- Widely recognized as a “gold standard” for public reporting of greenhouse gases (86 members as of Aug. 2006).
- Allows entity-wide reporting.

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Xerox is applying a three prong approach to identifying areas of opportunities to reduce energy & GHG emissions

Energy efficiency and conservation

"Tactical"



Advanced technologies
in Xerox process and products

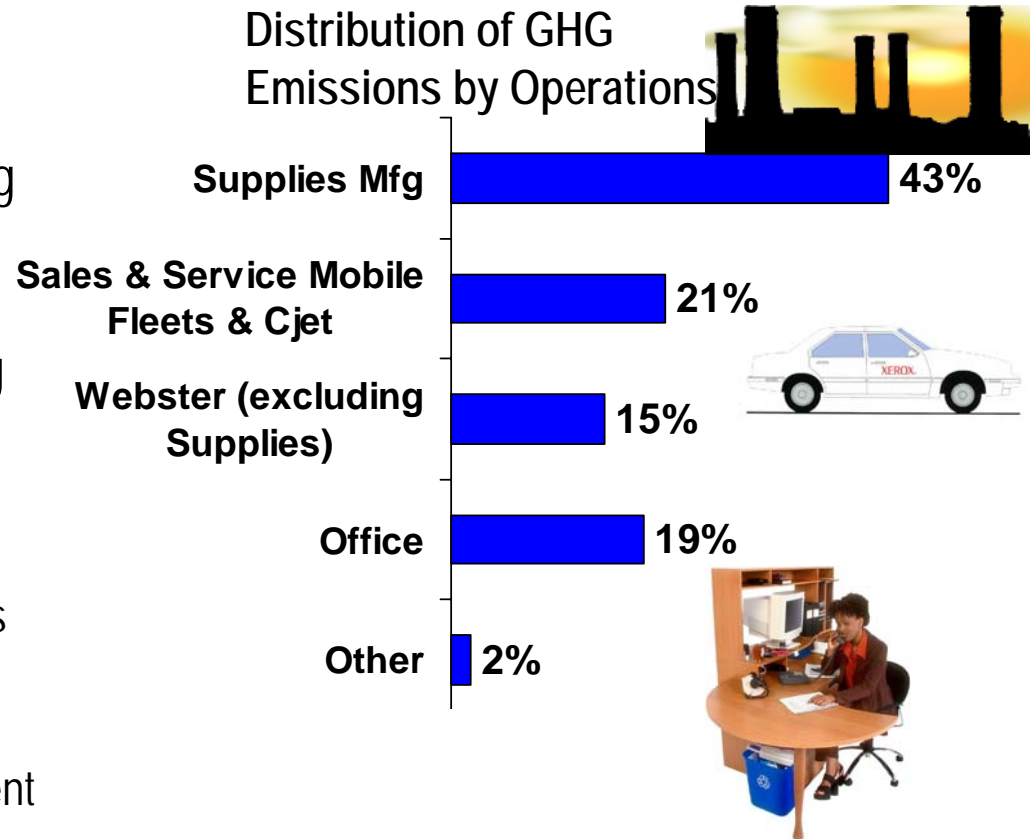
"Strategic"

"Clean" energy technology

Evergreen "roadmap"

Energy Efficiency and Conservation

- All employees can be engaged in this effort.
- Lots of small projects add up to big savings.
- The “way we work” can have a big effect on energy use:
 - From shutting of the product equipment, lights and computers when not in use...
 - To sophisticated call management that reduces miles driven by service technicians.



New technologies deliver environmental benefits to our customers and support Energy Challenge 2012

Emulsion Aggregation (EA) Toner

Breakthrough process for producing color and black toners:

- Less toner mass per page for smaller toner.
- Less toner waste for spherical toner.
- Less energy to produce and to print.

Conventional Toner



Paper

Small & Spherical EA Toner



Paper

40%- 45%
less toner
mass

Xerox's new EA Toner Plant Design

Plan designed around the process to be ultra-efficient



- "Intelligent" building.
- Building is packed with > 3000 sensors that feed into network to control energy use throughout "zones".
- Variable speed chillers, compressors & variable intensity lighting.
- Process design maximizes throughput, minimizes energy use.

“Traditional” manufacturing processes are being re-examined to find substantial energy savings

Toner’s “Secret” Agent

- Xerox is the inventor and world’s largest manufacturer of toner or “dry ink” powder.
- Grinding step in conventional toner is most energy intensive (up to 40% of total energy).
- Addition of “embrittling” agent (E-agent) makes toner particles easier to grind.
- Reduces overall energy consumption between 15-22% per pound of toner manufacturing for certain products – expected energy savings > 30 million kWh through 2008.



Xerox service fleet represents about 20% of Xerox GHG inventory

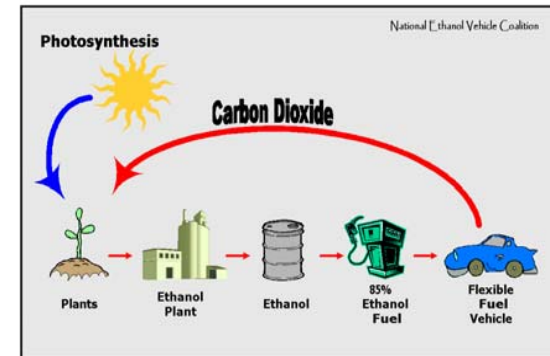
- From 2002-2005, 18% reduction (-19,400 mTons) in GHG emissions.
- Reduced miles driven in U.S. by 17 million miles.
 - Greater reliability of digital machines in field and longer life service parts.
 - Remote diagnostics, on-line help.

- More than 10,000 vehicles worldwide
- About 100 million miles driven in U.S. alone



New car technologies and alternative fuels present opportunities for significant GHG reductions

- Hybrid technology – expect more options in future; Prius piloted in 2006.
- Clean diesel engines and fuels – available today in Europe.
- “Bio-fuels”
 - Ethanol or E85 fuels.
 - Xerox is well positioned - 40% of US fleet is “flexible fuel”.
- GPS installed technology – when adopted will reduce miles through better call management.
- Hydrogen fuel cells.
 - Probably after 2012.



Clean energy technology options range from energy and vehicle procurement strategies to on-site installation of advanced systems

- Renewable energy options:
 - Green power purchases (electricity) opportunities are growing.
 - With creative partnering, on-site wind generation of electricity may be cost-effective.
 - Xerox's Dundalk, Ireland site working with Sustainable Energy Ireland to investigate feasibility of a 2 megawatt wind turbine to provide electricity for Xerox site and surrounding community.
 - Acceptable capital financing terms may be possible through multi-stakeholder effort.



Photomontage of Xerox wind turbine project with a V90 turbine on a 100m tower.

Other clean energy technologies are being investigated for Xerox facilities



Solar

**On-site
renewable
energy
options**



Geothermal



Combined heat/power

**Distributed
electricity
generation
systems –
improve
efficiency
of power
generation**



**Stationary Fuel cells for
distributed electricity
generation**

Summary

- Xerox joined US EPA Climate Leaders program in 2003.
 - Consultant help (E-source), guidance extremely helpful.
- Program took several years to develop.
- Keys to success are good technical guidance, cross-functional effort and senior management support.
- Thank-you for your attention!



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