

# Self Erasing – Reusable Paper

Inside Innovation at Xerox

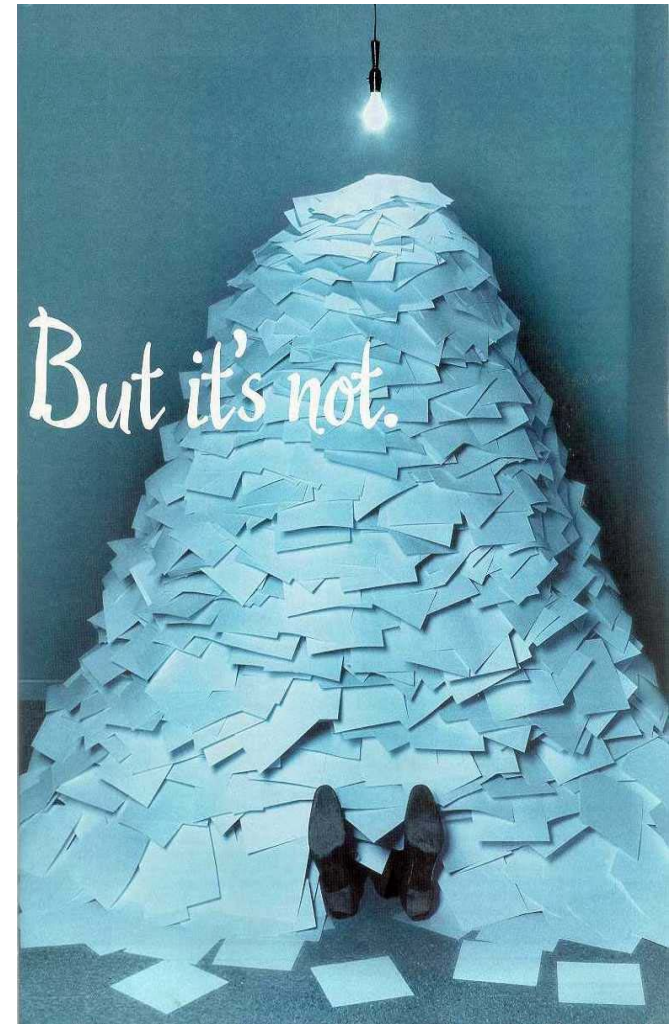
Palo Alto, Calif.

April 28 – 29, 2008



# The Paperless Office.....?

Everyone thought that the office of the new millenium was going to be paperless



# People love paper

People prefer reading from paper



Surveys show that in the office, 44.5 % of documents are printed for one-time-use only.....e-mails, daily calendar, coversheets.....



Then they throw it away....or hopefully recycle



# The Energy Cost of Paper....

To make one sheet of paper from virgin pulp...  
Requires about 204,000 Joules of energy



To make one sheet of recycled paper...  
Requires about 114,000 Joules of energy

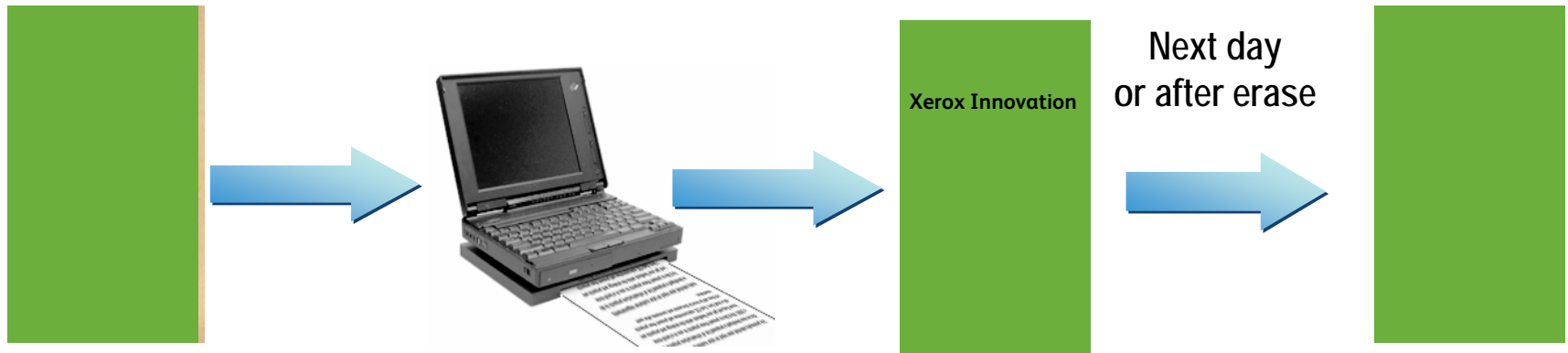


Energy numbers computed using [papercalculator@environmentaldefense.org](mailto:papercalculator@environmentaldefense.org)

# If we could reuse paper....and print on it again and again and again.....

To re-use one sheet of paper and print using a UV light bar and erase it...

Requires about 1000 Joules of energy (at 10% coverage)

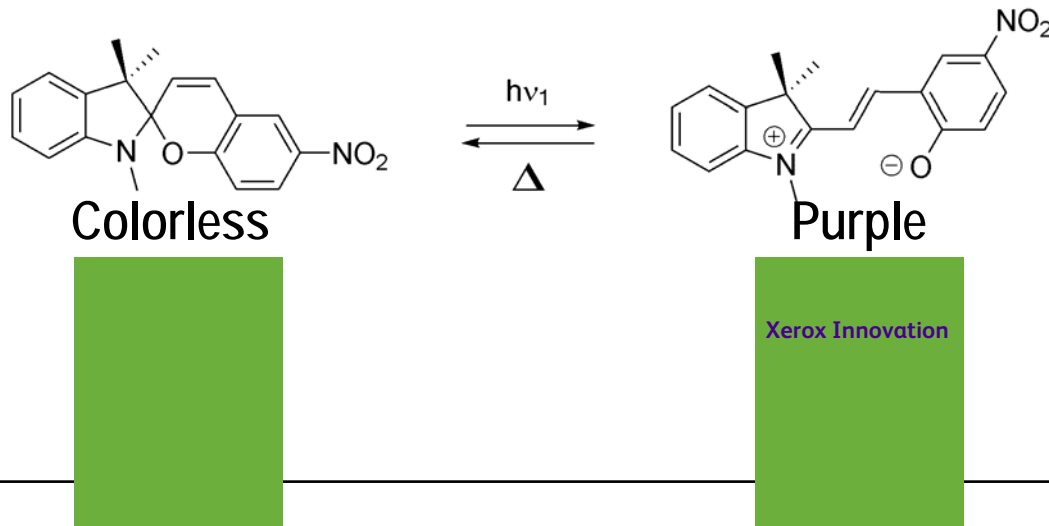
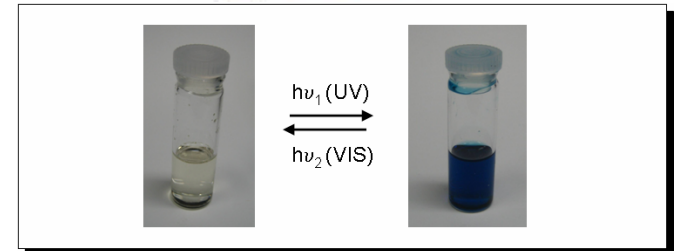


# Reusable Documents printed with an inkless printer?

A printer that does not use ink or toner.....?

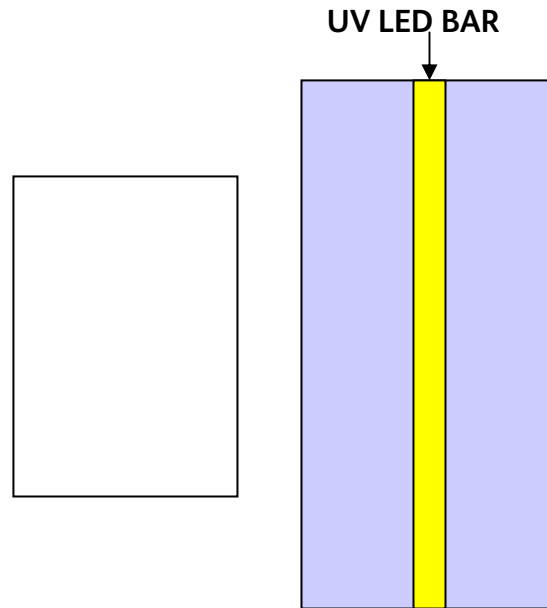


Making a mark using **Photochromic Switching**  
– producing a color without ink or toner





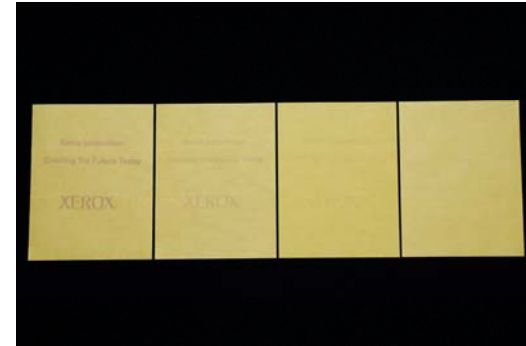
# How does it work?



# Reusable Paper

Paper-like feel and appearance

- Very low cost
- Reflective
- High contrast
- Self-erasing (24 hr. erase time)



Daily or single use documents – reducing paper wastage

- Emails
- Web documents
- Temporary documents for editing



A print capability for mobile workers.





# Reusable Paper - a green technology



Questions?

