



# Consumer Electronics Breakout Session



Industry Partners Meeting  
Consortium for Energy Efficiency  
October 16, 2008  
Mark Sharp



**Panasonic ideas for life**

# Panasonic Profile

- **Panasonic has a long history of developing energy efficient products from our founder's earliest and innovative product sold in 1918**
  - An improved Edison screw-type adaptor to allow electrical appliances to be connected into light sockets
  - From those humble beginnings, Panasonic grew into one of the world's largest CE manufacturers with annual sales exceeding \$90 billion (US)
  - Full line of digital electronics for consumer, business, and industrial markets
    - Products include flat panel TVs, blu-ray players, aviation in-flight entertainment systems, batteries for Prius automobiles, bicycles, plus tens of thousands of other products



# Panasonic & Energy Efficiency

- Corporate commitment to reduce Greenhouse Gas Emissions over 3 years by an absolute 300,000 tons by March 2010
- Seven-time award recipient from ENERGY STAR program
  - 16-year participant
  - Currently about 280 qualifying models across 14 product categories
- Environmental is a key driver of our business
  - At the heart of our product design process



# Efficiency & Panasonic Product Designs

- Panasonic product designers use Product Assessment tool to identify and improve each product's environmental performance, making our products “green”
- Target three main environmental burdens linked to CE
  - Conserving energy/preventing global warming
  - Effective use of resources (recyclability)
  - Minimize use of potentially hazardous chemicals
- Factor X developed by Panasonic as an indicator of “environmental efficiency” for our products
  - Used to quantify the product value over its life cycle
  - Enables comparisons of old to new models based on GHG emission reduction and efficient resource use
- Panasonic sets eco targets for product's environmental impact at design stage
  - Includes energy savings



# Panasonic's eco ideas strategy

- One year ago, Panasonic unveiled its eco ideas strategy focused on CO2 emissions reductions
  - 3 key elements of eco ideas includes eco ideas for products to reduce their environmental impact
  - Includes thorough pursuit of energy-efficient products as a top priority
  - Goal to produce the most products with the industry's number one energy efficient performance, and to phase out low energy efficient products
    - Based on listings in Japan's Energy Conservation Performance Catalog rankings of 7 key product categories



# Energy Efficiency Considerations: TVs

- Energy efficiency performance becoming more closely related to product competitiveness
- As large plasma TV manufacturer, competitiveness in energy efficient performance is critical
- Plasma TVs have been vilified in media and efficiency community for their energy consumption
- Yet many myths about PDP energy use don't hold up to scrutiny
  - PDP TVs do not use 6-8 times more energy than CRT TVs
  - Plasma TVs are not far more energy consumptive than LCD TVs



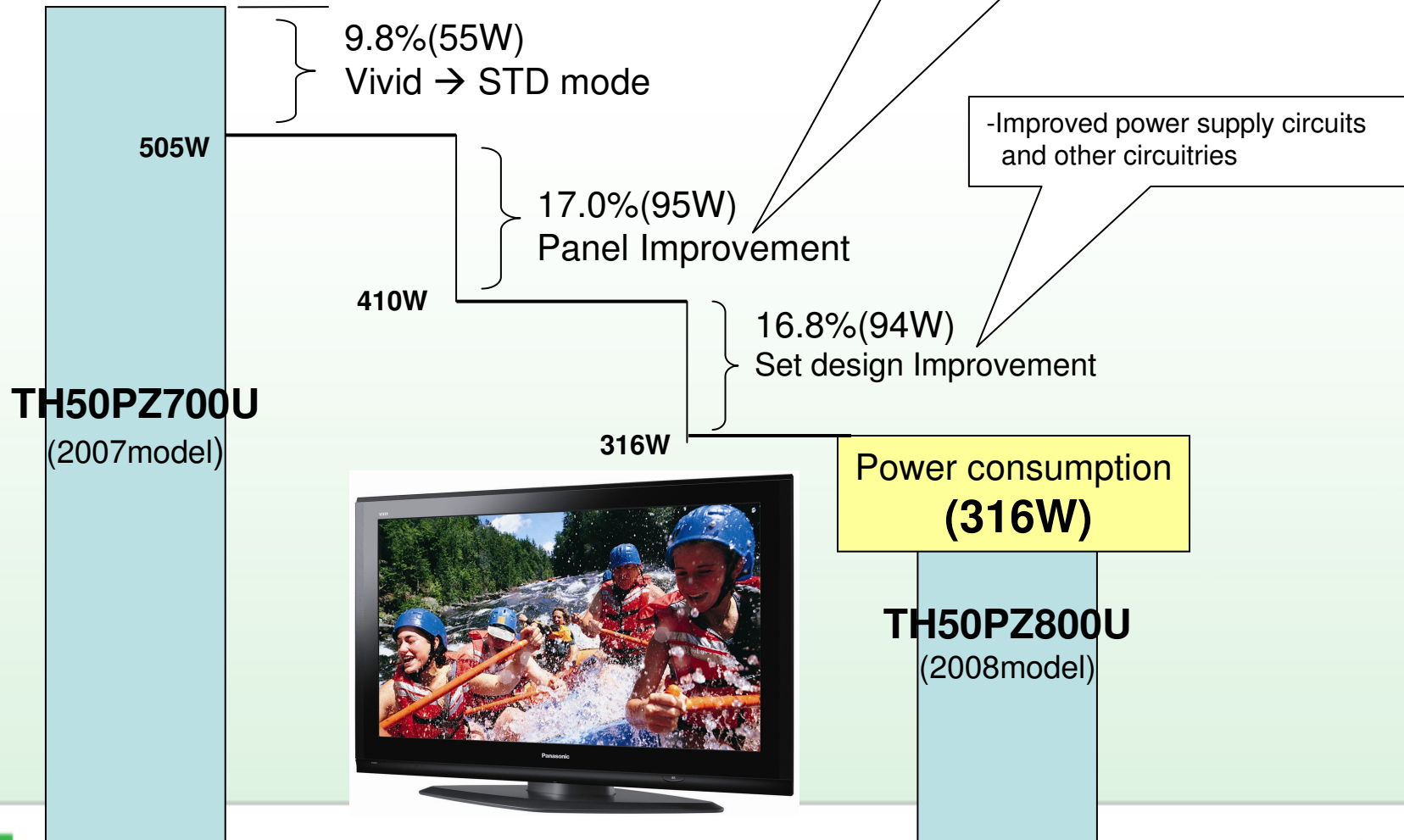
# Panasonic Plasma TVs & Energy Use

- Misconceptions about plasma TVs persist because currently available real data is elusive and almost non-existent
  - Will change with new ENERGY STAR TVs spec next month
    - Includes data base on model kWh use
- Pleasant surprise: plasma TVs are not a energy hogs
  - Many of our models as efficient or comparable to LCD TVs for energy use
  - Next month you'll find a large number of Panasonic plasma TVs qualified to the new ENERGY STAR spec
  - Fact: Most of our 2008 PDP models are between 30-40% more efficient than previous year's models



# Power consumption improvement for Panasonic 50FHD model

Power consumption  
(560W)



**Panasonic ideas for life**

# Benefits of ENERGY STAR

- Panasonic has long history of negotiating specifications with EPA & DOE
- ENERGY STAR specs, with international acceptance, often become our target goal for product design
  - Very difficult to initially achieve; requires extensive product redesigns and some additional costs
  - Negotiations on ENERGY STAR specs would be handled differently if known it was to become the floor
  - Going beyond ENERGY STAR is problematic for manufacturers and largely unnecessary
  - Real, meaningful energy savings are consistently achieved with ENERGY STAR
    - Forced menu in TVs spec will save \$2.33 billion kWh in 2011
  - Consumers likely to be confused by rebate initiatives that go beyond ENERGY STAR



# CEE Consumer Electronics Program Guide

- Largely good work but still fosters a few misperceptions and a uses a few wrong assumptions
  - TV savings over baseline (TV life expectancy considerably longer than 6 years)
  - Potential for savings somewhat exaggerated
  - Digital transition next February 2009 will not significantly impact TV energy consumption
    - New TV sales braking because of poor economy
    - 84% of households do not need new TVs to receive HD signals
    - Digital converter boxes by spec already efficient in order to qualify for government subsidy



# Upstream Issues

- Wrong assumption that manufacturers do not make more efficient products because of a lack of demand
  - Panasonic does not build a less efficient line of products or models
    - Unlike some auto manufacturers that severely limit the availability of certain hybrid models
  - Panasonic product line differentiated by features and functionality not energy efficiency
- Again, energy efficiency is a corporate priority for product design at Panasonic



# Midstream Issues

- Incentives to retailers can be a slippery slope
  - Heavy reliance upon minimally trained sales clerks
  - Clerks may be forced to differentiate between products by “relative” level of efficiency
  - Likely to create consumer confusion
  - Sales clerk “spiffs” could backfire in future promotion of energy efficient products



# Downstream Strategies

- TVs: no additional costs linked to HD broadcasts so not an issue with consumers
- Consumers will soon have more access to product energy use information via ENERGY STAR web site, and FTC Energy Guide labels
- PG&E observation correct that downstream utility models work better for home appliances than CE
- Energy efficient home appliances sold a price premium—Unlike CE products for which efficient models are already competitively priced

