

Utilizing ENERGY STAR as Part of Utility Incentive Programs

October 30, 2012

Thomas Bolioli

Terra Novum

Consultant to the ENERGY STAR Program

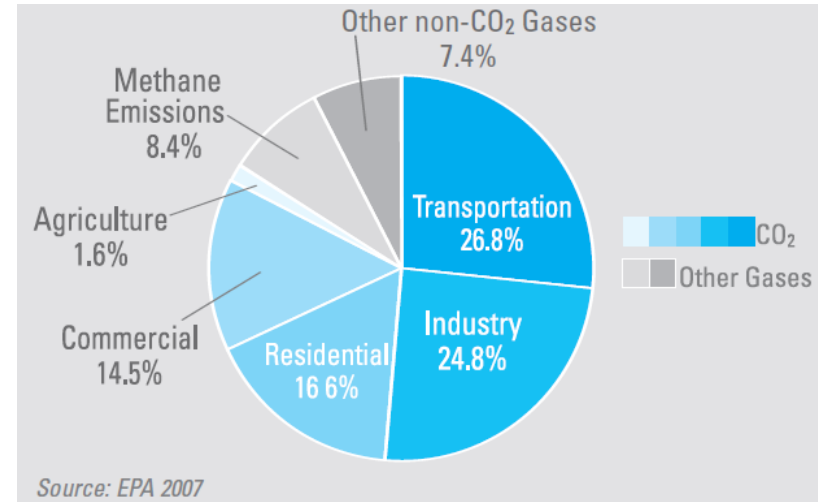


Learn more at energystar.gov

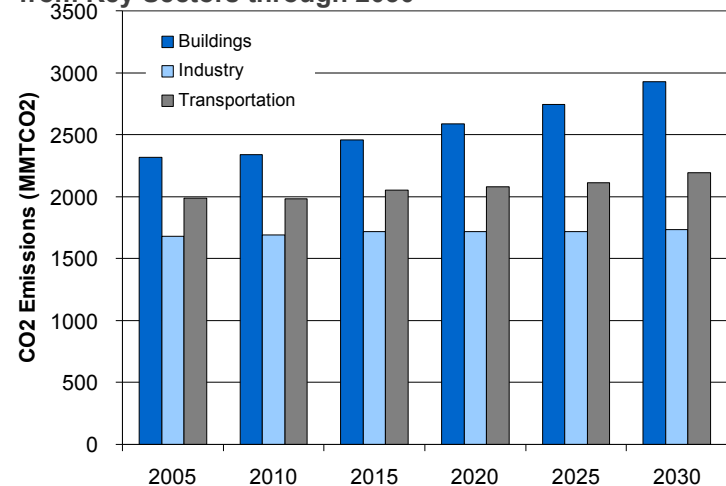
About ENERGY STAR



- Voluntary program started in 1992
- GOAL: Reduce greenhouse gas (GHG) emissions through large win-win-win opportunities with today's energy efficient technologies and practices
- Achieve 30% savings in many buildings, homes, and facilities
- Provide credible information to buyers
- Work with the marketplace to capitalize on motivations of individual actors

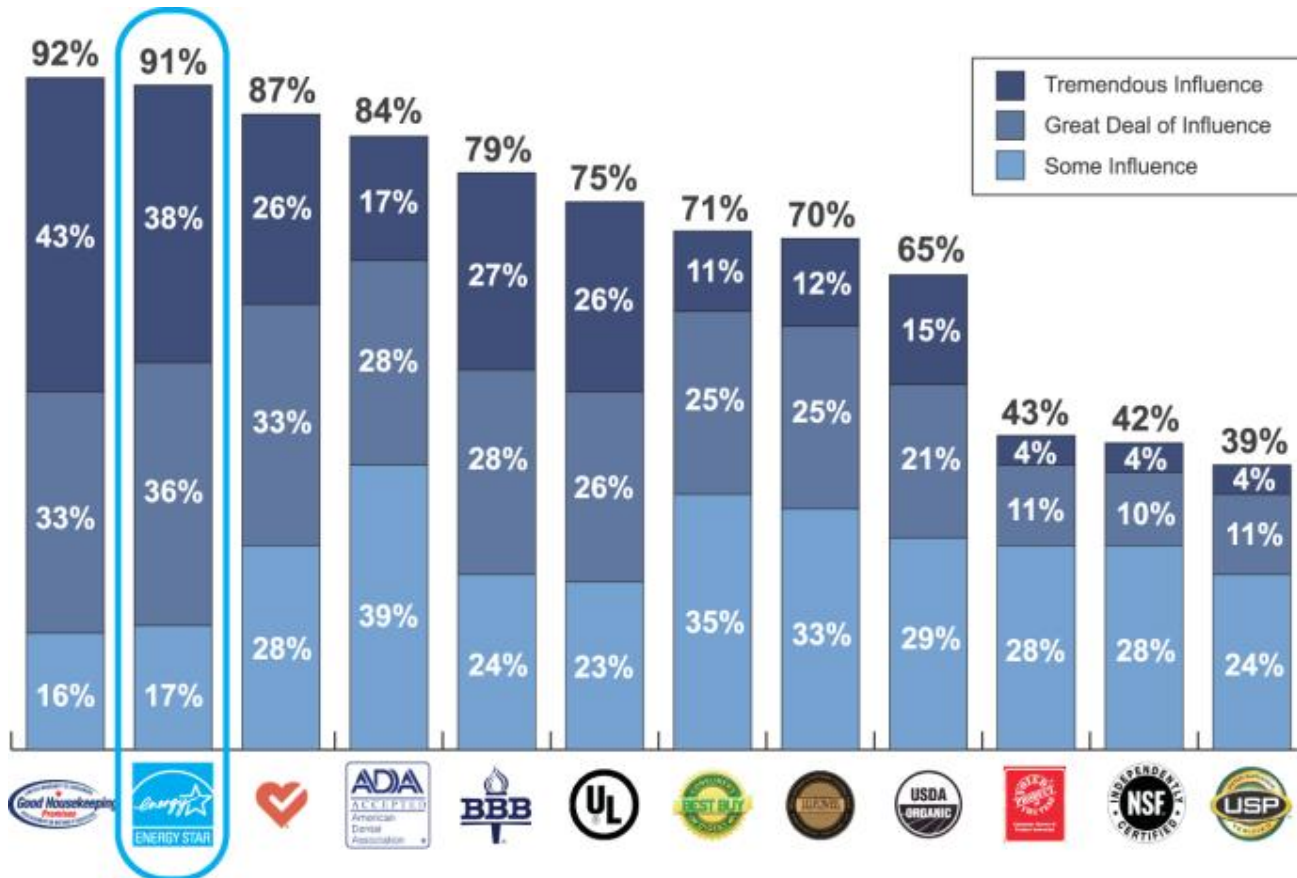


Projected GHG Emissions from Key Sectors through 2030



Source: AEO 2008

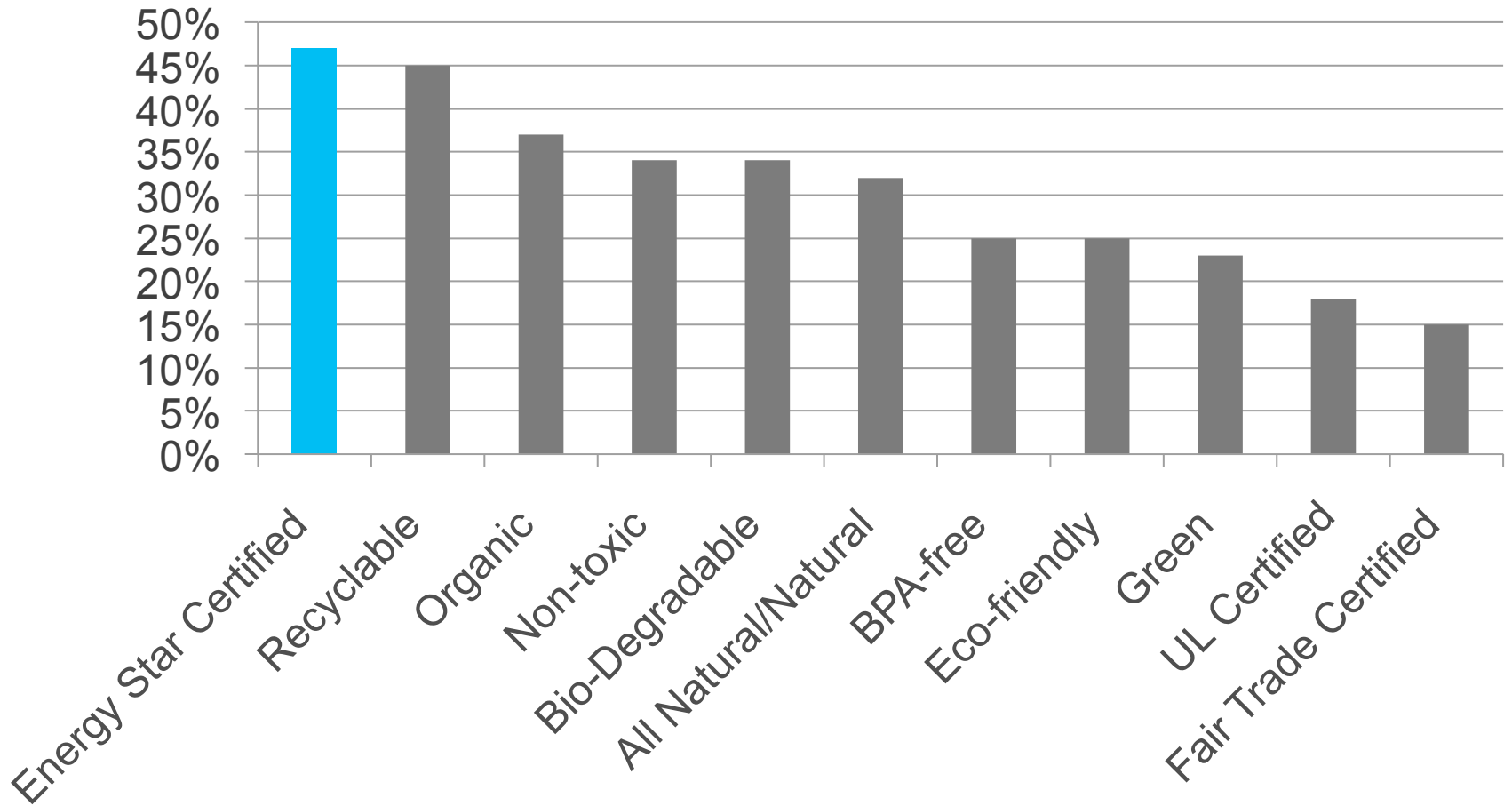
ENERGY STAR Influence



Source: Fairfield Research, July 2009

The ENERGY STAR mark ranks among the highest level of influence on product purchase among all consumer emblems, similar in ranking to the *Good Housekeeping Seal*.

ENERGY STAR Has Impact



Purchased Product because of Label or Claim (% of 18+ online population/base: heard of any description)



Source: GfK Roper Green Gauge® Survey 2012

Origins of ENERGY STAR Set-top Box Program



- Program started in 1999
- Intended to address:
 - Split incentives
 - “Low” power mode only
 - Assumed 24/7 operation

Program Relaunch in 2008



- New Approach
 - Partnership Agreement for Service Providers
 - Ensures power management is not defeated
 - Annualized Typical Energy Consumption (TEC)
 - Based on observed user behavior (Nielsen Data)
 - Provides incentives for increasing time in lower power modes
 - As well as incentives to creates true low power modes
- 52% of the market or 15 million STBs in 2010
- Wide Industry Support

ENERGY STAR Test Method



- Based on International Standards (CSA, IEC, CEA)
- Accredited labs for testing and further verification testing performed by certification bodies
- Test Method Includes Multiple STB Modes:
 - Live TV Viewing
 - DVR Recording and Playback
 - Sleep, Auto Power Down, and Deep Sleep
- Test Method Includes Multi-room STBs
- Test is performed against real world Head Ends to ensure device performs in test as it would in situ

Version 4.0 Specification



- Finalized in April 2011 → Effective July 2013
 - Currently under revision to enhance Multi-Room testing and adjust for new technology
- Currently:
 - 32% Average Decrease in Base Allowances
 - 50% Decrease for IP Boxes
 - 21% Average Decrease in Adder Allowances
- Will represent the most energy efficient devices on the market next year

How ENERGY STAR Enables Incentive Programs for STBs



- Provides an impartial 3rd party means of evaluating products
- Has 3rd party verification testing and is regularly refreshed
- Has support from industry and international stakeholders
- Focuses on energy consumption and not power consumption
- ENERGY STAR tracks the market and will adjust for new and innovative technologies

ENERGY STAR integrates into any Incentive Program



- Specification is easy to reference
- ENERGY STAR is a highly visible efficiency brand
 - Eliminates branding costs
- Incentive Program can focus on management and/or plant and network efficiency

Beyond the Box



- ENERGY STAR labeled boxes promote better whole home efficiency
- ENERGY STAR fits into a first to market program as well as more traditional incentive programs
- ENERGY STAR resets based on market performance, ensuring your incentive program doesn't get stale

For More Information



- Katharine Kaplan
U.S. Environmental Protection Agency
Kaplan.Katharine@epa.gov
- Matt Malinowski
ICF International
MMalinowski@icfi.com
- Thomas Bolioli
Terra Novum
tbolioli@terranovum.com