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# Appliance Manufacturer's Tax Credit

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# Appliance Manufacturer Tax Credit

## ■ Purpose

- Spur market transformation
- Provide manufacturers with incentives to produce super-efficient units
  - Credit per unit of super-efficient product produced over a baseline amount

## ■ History

- Result of negotiations on federal Clothes Washer standard in 2000.
  - Included in failed 2003 Energy Bill
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# Appliance Manufacturer Tax Credit

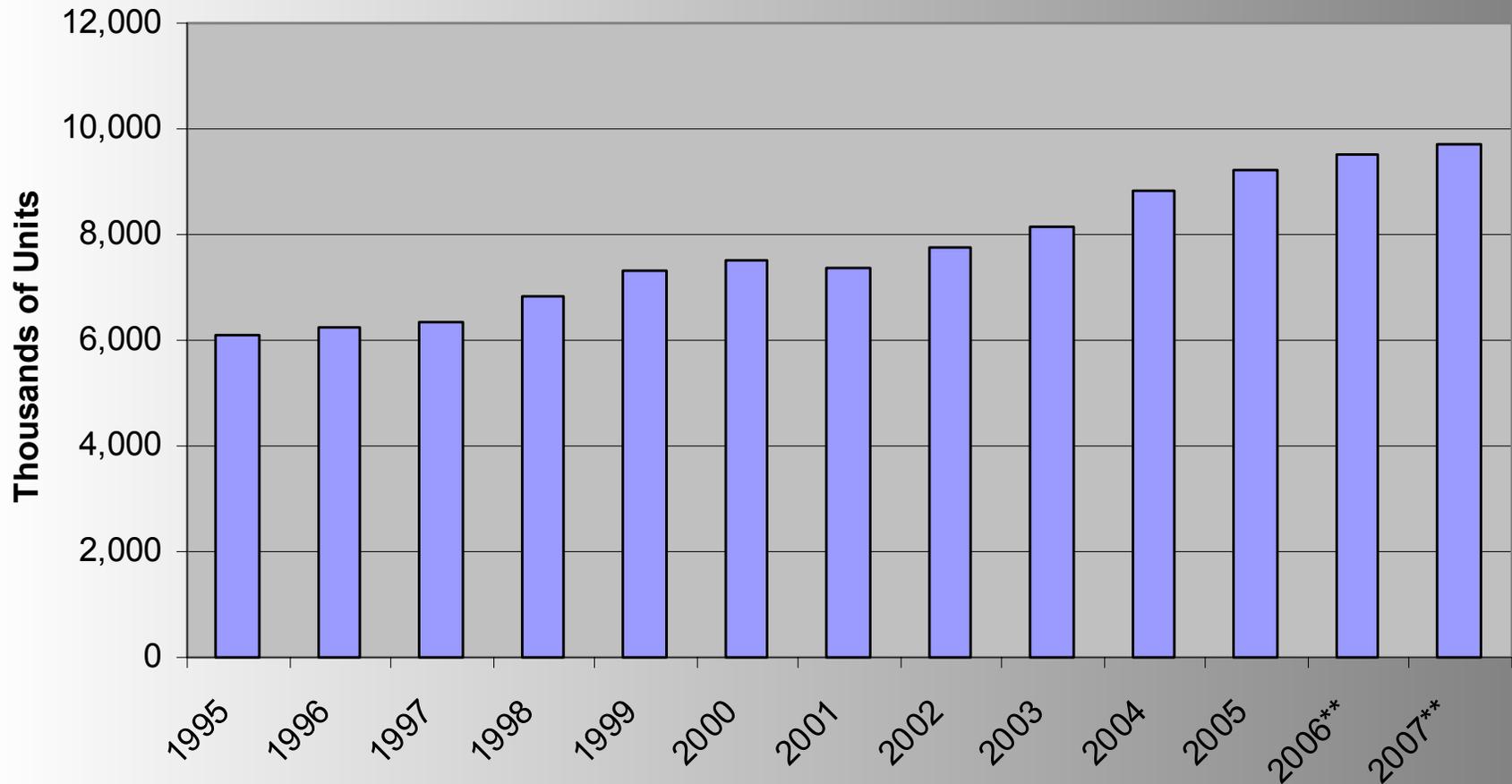
## ■ Relationship to Energy Star

- Tax Credit is tied to Energy Star specifications
  - Only rewards production that exceeds previous year's levels
  - Result – Substantial increases to Energy Star production
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# Clothes Washers-Trends and Forecasts

*9.2 mil. Washers shipped in 2005; growth expected in 06, 07.*

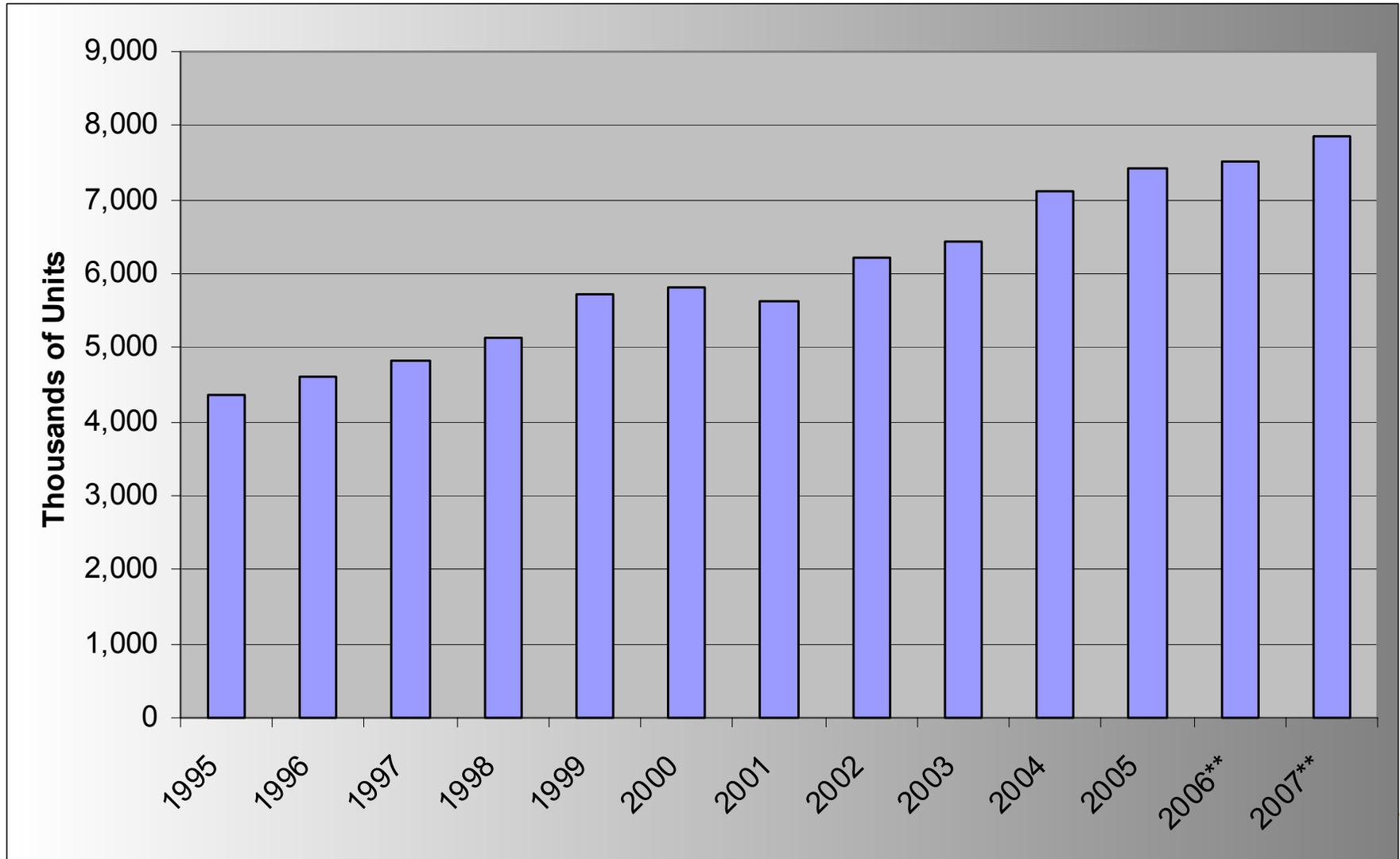
**Automatic Washer Shipments**



\*\*Forecasts are as of Jul 31, 2006 Forecasts are a median of the participating companies' forecasts.

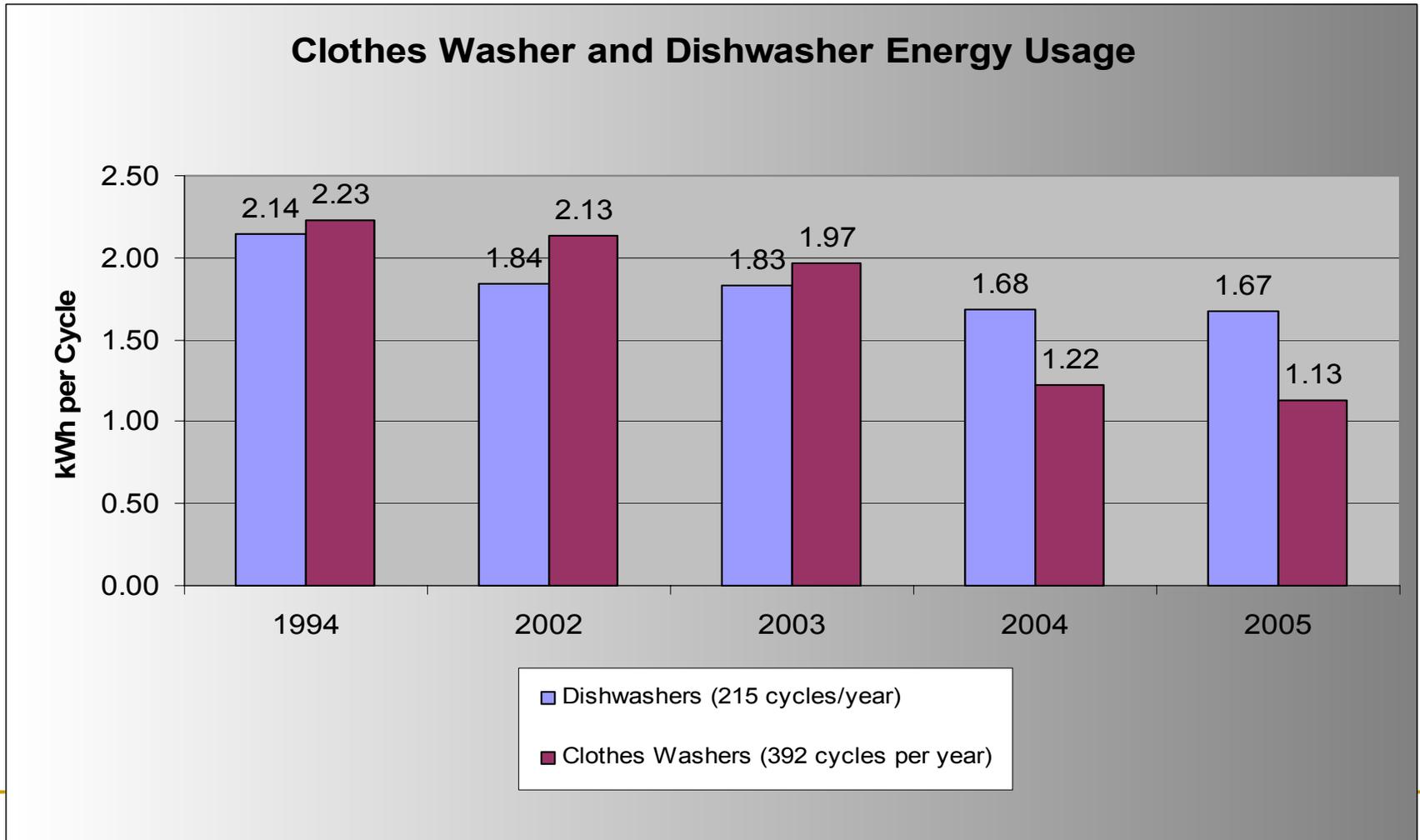
# Dishwasher Shipments

- *7.4 million units shipped in 2005*



\*\*Forecasts are as of Jul 31, 2006 Forecasts are a median of the participating companies' forecasts.

# CW and DW Energy Usage



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# Appliance Manufacturer Tax Credit

## *General Provisions*

- Maximum benefit \$75,000,000 per company
  - Effective for products produced in 2006 and 2007
  - Three-year rolling average baseline for clothes washers and dishwashers
    - Three-year average rolling baseline, with a 110% multiplier, for refrigerator/freezers.
  - Qualified production only includes those products *produced* in the United States
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# Appliance Manufacturer Tax Credit

## *Product Provisions*

### ■ **Clothes Washers**

- \$100 for units produced in 2006 and 2007 meeting 2007 Energy Star Clothes Washer specification

### ■ **Refrigerator/Freezers**

- \$75, \$125 and \$175 for production that meets corresponding efficiency levels
  - 15%, 20% and 25% more efficient than current DOE standard.

### ■ **Dishwashers**

- Credit amount – \$36 – based upon how much more efficient the 2007 Energy Star specification is compared to the current Energy Star specification
    - \$3 per each 1% increase in efficiency with maximum of \$100 for each unit produced over baseline.
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Product	Efficiency Level	Credit	Year(s) effective
Clothes Washers	2007 Energy Star Level	\$100	2006-2007
Refrigerator/Freezers	15%	\$75 <sup>[1]</sup>	2006
	20%	\$125	2006-2007
	25%	\$175	2006-2007
Dishwashers	2007 Energy Star Level	\$36 <sup>[2]</sup> <i>(Incentive amount equals \$3 per 1% increase in efficiency from the 2007 Energy Star specification)</i>	2006-2007

<sup>[1]</sup>

Subject to a \$20,000,000 cap for the term of the credit.

<sup>[2]</sup>

Subject to a \$100 per-unit cap.

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# Appliance Manufacturer Tax Credit

## *General Comments – Benefits*

- Manufacturer decision lead times are long and implications of the tax credit are only now affecting plans and production
  - AHAM is currently collecting data on actual extent of eligible production
  - Manufacturers report that tax credit availability is causing increased production of high efficiency products at an earlier time
  - These production decisions have also caused retention of manufacturing jobs in the U.S.
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# Appliance Tax Credit

## *Consumer Benefits*

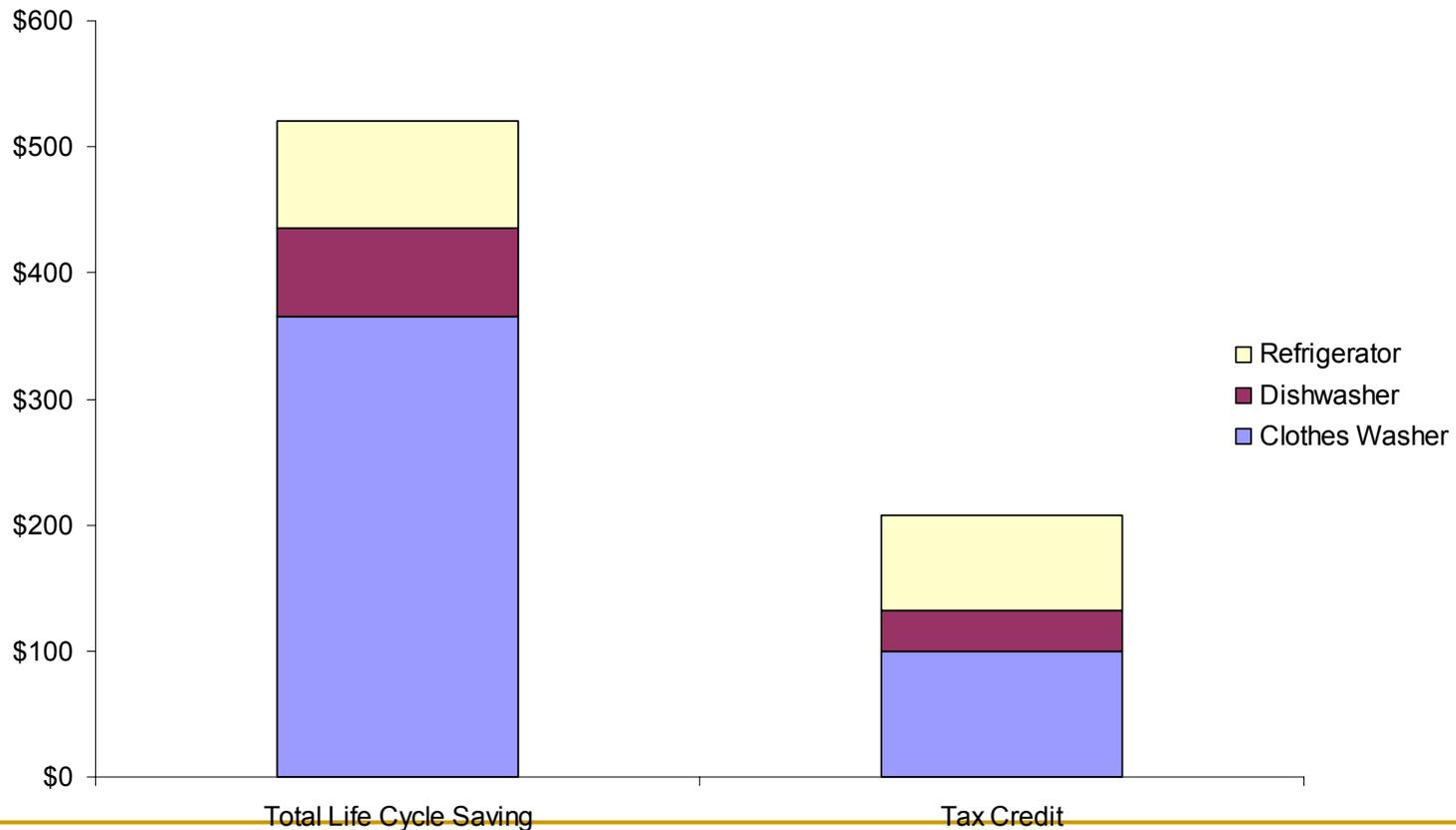
- Discounted life cycle savings in operating costs to consumers are larger than tax credit amounts
  - Result – A net economic benefit to consumers and society



# Appliance Tax Credit

## *Consumer Benefits - continued*

Consumer Operating Savings vs. Tax Credit  
Per Appliance



Based on Energy Star calculator using electricity at \$.104/kWh, gas at \$1.39 per therm and water at \$4.158 per 1000 gallons, 4% discount rate

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# Appliance Tax Credit

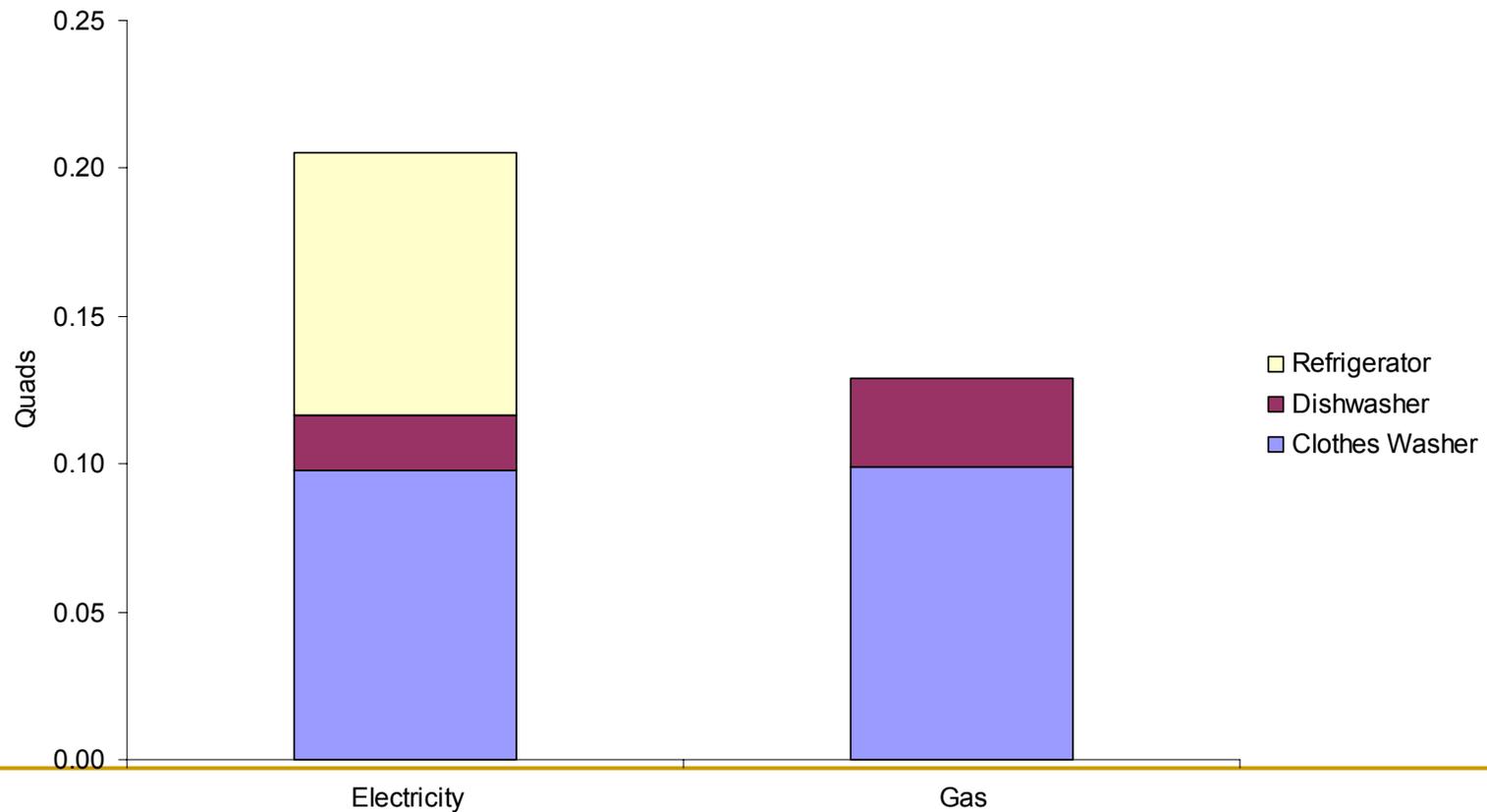
## *Energy Savings*

- Availability of tax credits has accelerated introduction of new, more efficient product platforms
  - Availability of tax credits is increasing production of more efficient models
  - Once platform is introduced or production is increased, manufacturers are extremely resistant to revert backwards, creating lasting energy saving effects
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# Appliance Tax Credit

## *Energy Savings - continued*

Cummulative Savings in Gas and Electricity  
Total over 10 year market response and life of product



Energy savings based on 200,000 units per year of each appliance for 10 years of program effect

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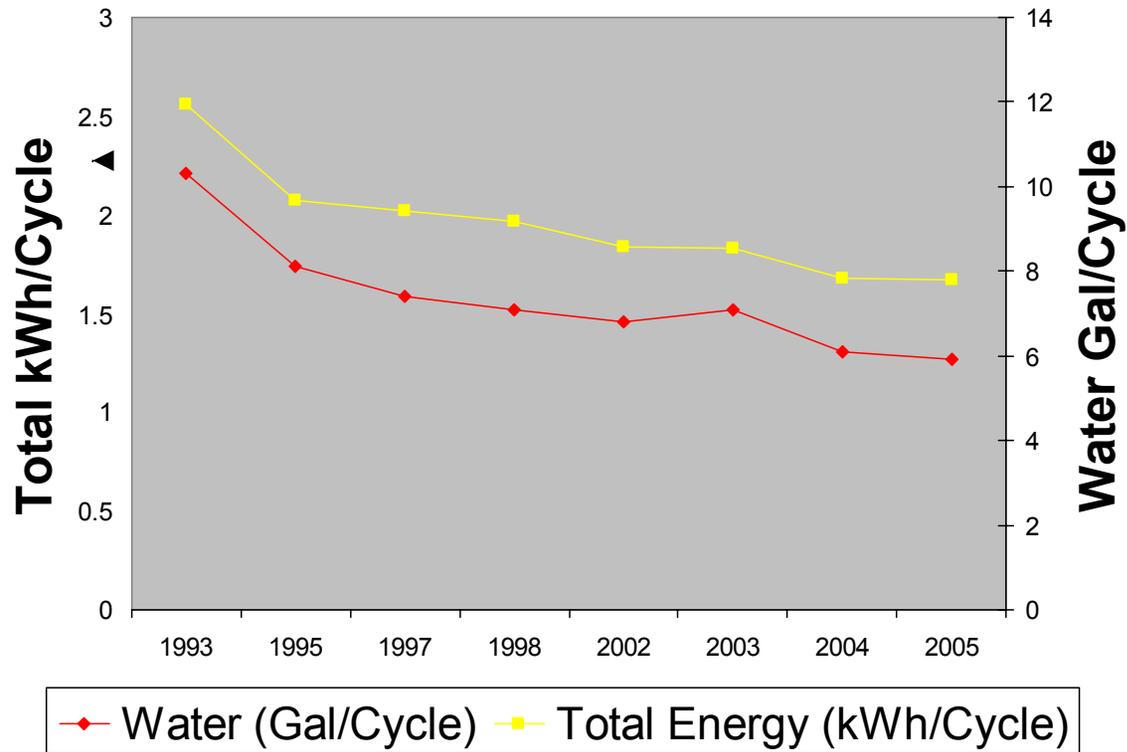
# Appliance Tax Credit

## *Water Savings*

- Tax credit effects also extend to water savings
    - Water factor for clothes washers
    - More efficient use of water in dishwashers
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# Dishwasher Energy and Water Trends

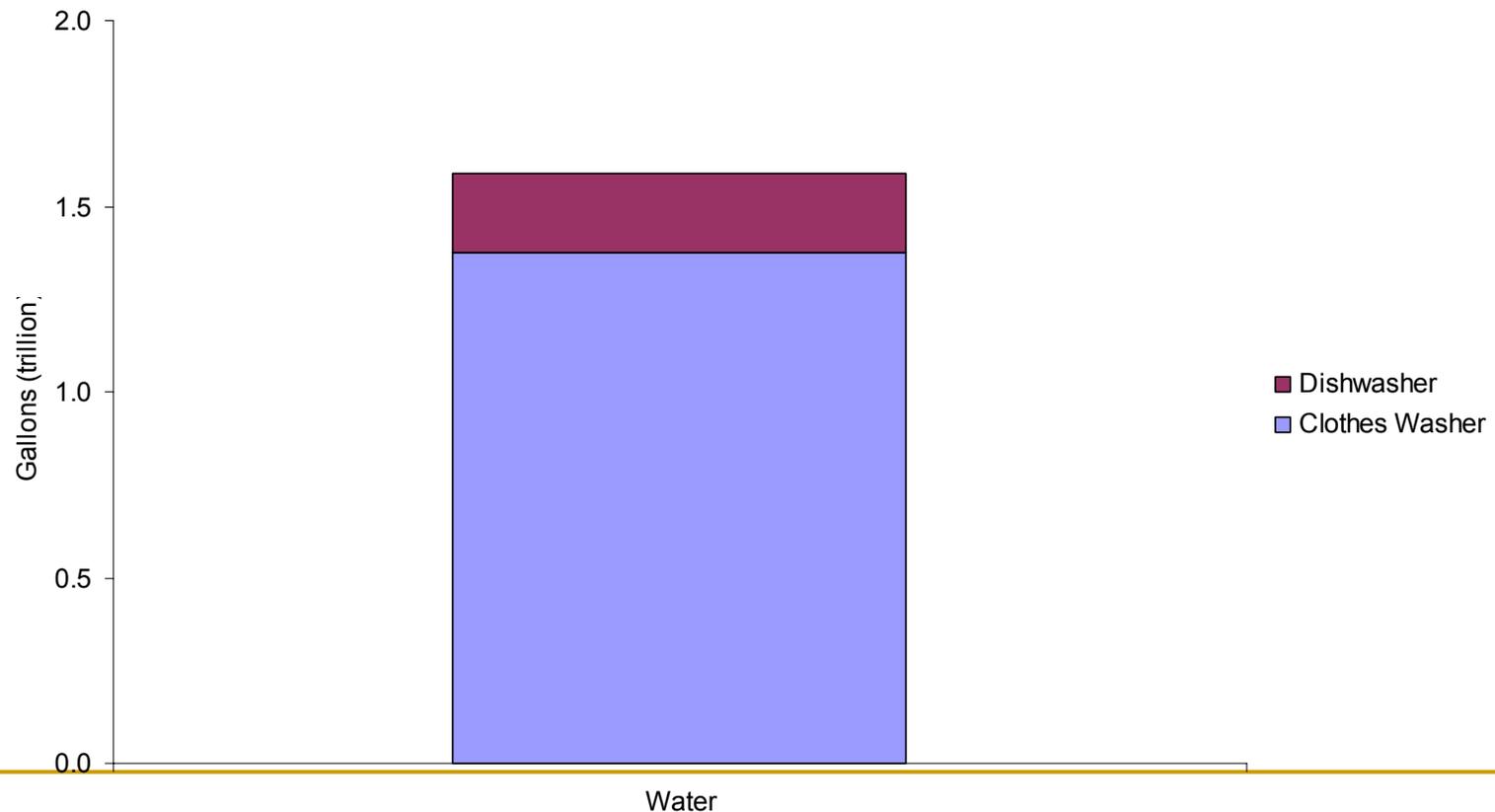
*AHAM shipment weighted avg. values*



# Appliance Tax Credit

## *Water Savings - continued*

Cummulative Savings in Water  
Total over 10 year market response and life of product



Energy savings based on 250,000 units per year of each appliance for 10 years of program effect

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# Appliance Tax Credit

## *Summary*

- Tax credit has benefited overall economy
    - Benefits to consumers that far outweigh amount of tax credit
    - National savings in energy and water
  - Tax credit has influenced production planning to accelerate new models
    - Create consumer benefits
    - Increase manufacturing jobs
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