Consumer Electronics Association

www.CE.org

Economic impact of the CEC staff proposal

CEC's Approach

- Set on-mode energy use limit
- "Remove inefficient TVs from the marketplace"
- No costs, no adverse impacts on stakeholders (consumers and businesses)
- Justify with savings estimates based on business-as-usual scenarios

Market Characteristics & Model Assumptions

- Roughly 3.2M flat panel television sets will be sold in California in 2008 with a wholesale value of roughly $2.7B. This is expected to have a CAGR of 6.5% over the next 5 years.
- Simulations used to model uncertainty around outcome and ascertain affect of arbitrary changes in available TV models.
- Model simulation includes 1,300 iterations with error of estimate less than 2 percent

Model Assumptions

- Using available data from ENERGY STAR for 238 television models, we found 51 models – roughly 22% - would not currently qualify to be sold in CA under the CEC's 1/1/2011 proposal.
- The number of non-qualifying models is low, because the sample of 238 models only includes ENERGY STAR qualifying models.
- We model three separate scenarios with the respective assumption that 30%, 20%, and 10% of flat panel models not qualifying to be sold in CA under the CEC proposal in 2011.

Model Assumptions

- The model assumes the following:
  - The same number of television sets are sold in CA regardless of the CEC proposal – i.e. consumers do not alter planned number of TV purchases
  - The non-qualifying models that would have been purchased (i.e. 30%, 20%, and 10% of all models) are replaced by qualifying models under the CEC proposal.
  - Non-qualified TVs tend to be larger, more expensive with expanded functionality. The average price delta between qualifying and non-qualifying models is estimated to be $1,019. In the model we choose a more conservative $400-$600 price delta.

Model Assumptions

- The model assumes the following:
  - The number of workers employed by retailers is a function of the value of total sales.
  - The multiplier effect for California retail employment and labor compensation is similar to the national level as estimated by PriceWaterhouseCoopers (PWC). See PWC's report: *US economic contribution of consumer electronics: A study of direct, indirect, and inducted effects on employment and business activity.*

Model Assumptions

- In the model we have ignored the following:
  - The impact from reduced installer services. By ignoring this we bias the results downward because installer services tend to be higher for more expensive models and for the specialty electronics retail channel.
  - The impact from reduced attachment purchases. Assuming no change in attachment purchases (i.e. consumers buy the same type of attachment services likes HDMI cables, DVD players, and audio systems) biases the results downward because consumers tend to spend more on attachment purchases for more expensive television models.
  - Any and all externalities not otherwise explicitly included.

30% of TV Models Eliminated

- Assuming roughly 30% of models fail to qualify in CA:

  $130.2M annual sales and income tax revenue loss to CA

  15,800 jobs lost in CA

20% of TV Models Eliminated

- Assuming roughly 20% of models fail to qualify in CA

$87.5M annual sales and income tax revenue loss to CA

10,600 jobs lost in CA

10% of TV Models Eliminated

- Assuming roughly 10% of models fail to qualify in CA

  $44.2M annual sales and income tax revenue loss to CA

  5,300 jobs lost in CA

Summary of Model Results

- With 30% of the models not qualifying:
  - *$130.2M annual sales and income tax revenue loss to CA*
  - *15,800 jobs lost in CA*
- With 20% of the models not qualifying:
  - *$87.5M annual sales and income tax revenue loss to CA*
  - *10,600 jobs lost in CA*
- With 10% of the models not qualifying:
  - *$44.2M annual sales and income tax revenue loss to CA*
  - *5,300 jobs lost in CA*
- Even if only 1-2 percent of models are removed the model suggests an annual tax revenue loss to CA of $6.9M and result in the loss of 820 CA jobs

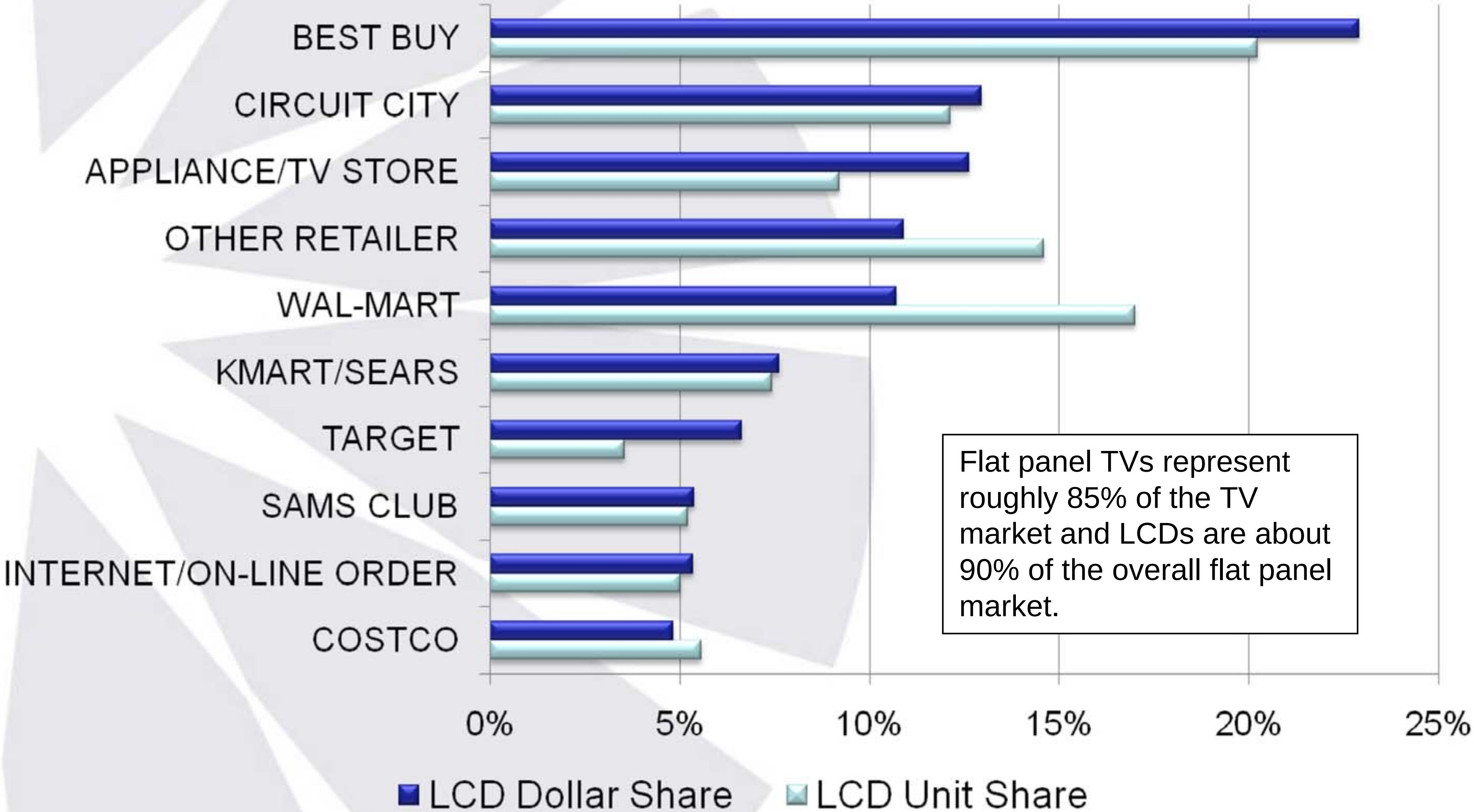
Other Externalities?

- Today 75% of consumers buying consumer electronics research their purchase online before making the final purchase.
- What type of externalities could be created by arbitrarily removing certain sets?
  - Increase out-of-state or online purchases?
  - Cause consumers to increase driving distances (and therefore environmental impact) in search of desired product.

California Economy

- Unemployment rate is at 8.2% as of October, highest in 14 years
- State's budget deficit is expected to exceed $40 billion
- Governor and legislature proposing tax increases of $15-20 billion, a portion of which is an increase in sales tax

Flat Panel Channel Share



Flat panel TVs represent roughly 85% of the TV market and LCDs are about 90% of the overall flat panel market.

Source: Synovate, CEA

Impact on Local Businesses and Retailers

Alternative Approaches that Support Energy Efficiency

Alternative Approaches

- ENERGY STAR
- CEA proposal for data reporting
- Automatic power-down
- Require that all TVs sold have “energy saving mode”
- Incentivize purchase of ENERGY STAR TVs and incentivize replacement of older, less efficient CRT and rear projection TVs with FPTVs

ENERGY STAR & TVs

- Widely supported and very successful
- Significant impact on marketplace
- Energy savings and carbon emissions reductions support California greenhouse gas emissions reduction goals
- Current efforts to promote ENERGY STAR for TVs: Alliance to Save Energy and CEA partnership
- Time to accelerate ENERGY STAR Tier 2

CEA Proposal for Data Reporting

- Mandatory reporting of energy use data to CEC
- Reporting active mode power consumption pursuant to IEC 62087 Ed. 2.0, along with model numbers and display technology
- Was not a request for labeling, as this will be addressed at national level by FTC in 2009 for TVs and other electronics

Automatic Power-down

- Referenced in staff report.
- Consider an automatic power-down requirement for TVs, particularly for scenarios where a video signal (e.g. DVD player, game console, etc.) is lost, could be considered for ENERGY STAR Tier 2 as a significant energy savings opportunity.

Requirement for "Energy-saving Mode"

- Referenced in staff report.
- Consider a requirement that all TVs be shipped and sold with an "energy-saving mode" as the default setting.

Incentivized Replacement of Older TVs

- Pilot program underway to incentivize sale of TVs that perform at ENERGY STAR levels or better
- Incentivize replacement of older, less efficient CRT TVs and RPTVs with FPTVs?
- Both are opportunities for collaboration between utilities, state agencies, and the CE industry

A Better Economic Approach

CEC's proposal to regulate TVs hurts consumers, businesses, competition and innovation; we should instead…

- Incentivize and promote energy efficiency for TVs
- Stimulate business rather than driving independent dealers and retailers out of business
- Increase rather than decrease tax revenues
- Accelerate the digital transition
- Achieve energy savings and emissions reduction goals