Information Technology Industry Council
Leading Policy for the Innovation Economy

Evolving Television Technologies

Colleen Pickford
Manager of Environmental Affairs
Information Technology Industry Council

The Information Technology Industry Council's Environmental Coalition

- The Information Technology Industry Council (ITI) represents the nation's leading high-tech companies and helps member companies achieve their policy objectives through building relationships with Members of Congress, Administration officials, and foreign governments; organizing industry-wide consensus on policy issues; and working to enact tech-friendly government policies.

- The Environmental Coalition is a member-driven team of environmental professionals within the Information Technology Industry Council (ITI) that shapes policy and drives standards on issues surrounding electronics recycling, energy efficiency, green procurement and materials of concern in the federal, state and international arenas.

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A Changing Screen

- In the past ten years television display technology has developed rapidly.
- The traditional Cathode Ray Tube (CRT) technology is losing market share to new flat panel technologies.
- New technologies are emerging every year.

TV Technologies

Flat Panels: Include LCD and Plasma, generally under 3.5” inch thickness. OLEDs and Surfaceconduction Electron-emitter Displays (SEDs) are newcomers to this category

Rear Projection: DLP, LCD, LCoS

Tube: Traditional Cathode Ray Tube

Flat Panels: LCD vs. Plasma

- LCD-Liquid Crystal Display- “transmissive”- the light isn’t created by the liquid crystals themselves. Instead, a light source (bulb) behind the panel shines light through the display.
- Plasma- “emissive” - the panel is actually self-lighting. Basically, the gas (plasma) causes the pixels to glow, which creates the TV image.

	LCD	Plasma
Screen Sizes	5-65+inches	42-65 inches
Power Consumption	Slightly more efficient	Slightly less efficient
Off-angle viewing	Images fades slightly at extreme angles	Excellent from all angles
PC Connectivity	Common	Less common
Black-level	Varies by price	Generally excellent
Resolution	Varies by price	Varies by price
Lifespan	60,000 hours	60,000 hours

Source: cnet.com

Rear Projection Televisions

- Sometimes referred to as “microdisplays”
  - Image generated by thumbnail sized semiconductors
- Technologies include Digital Light Processing (DLP), LCD and Liquid Crystal on Silicon (LCoS)
- Not as deep as rear projections of the past
- Image quality substantially brighter than flat panel technology

Direct View CRT & Front Projection TV

- CRT
  - Currently the most common type of TV
  - Screen size up to 40”
  - Generally the least expensive option
  - Contrast and color fidelity are generally excellent
- Front Projection
  - “Movie Theater”-like technology

Purchasers of Televisions

- Largely a consumer market
- Institutional purchasers of televisions include:
  - Hotels
  - Hospitals
  - Airports
  - Schools

Contact Information

Colleen Pickford

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cpickford@itic.org

202-626-5755

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