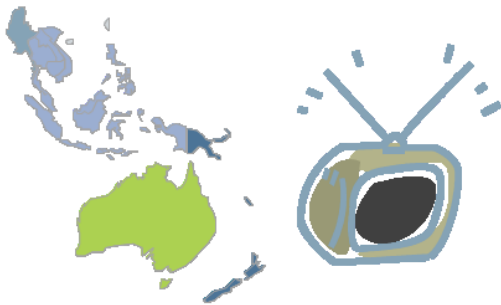
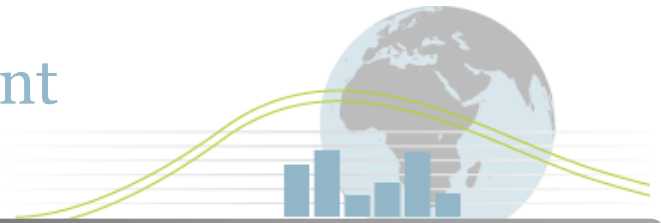


4^E

Mapping Document



Country:	France
Technology:	Televisions
Sub Category:	All Televisions

Introduction

The first stage in the Mapping and Benchmarking process is the definition of the products, i.e. clearly setting the boundaries that define the products for use in data collection and analysis. Doing this ensures that comparison between the participating countries is done against a specific and consistent set of products.

The summary definition for this product is:

Television sets, defined as:

'A commercially available and mains electricity powered product consisting of a display and one or more tuner(s)/receiver(s) combined in a single housing. It is designed to receive, decode and display audiovisual signals and reproduce sound from analogue sources and/or digital sources that are decoded directly broadcast via satellite, cable or antenna signals. In the case of digital sources, decoding may be via any external adaptor or receiver.'

Data will be analysed based upon actual screen size.

For which segregation and analysis will done through data requested on:

- Screen size
- Aspect ratio (used to calculate screen area and so consumption per unit screen area)

And for which additional later analysis may be planned using data requested on:

- Screen technology
- Analogue or integrated digital
- HD or not

Exclude:

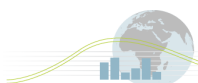
- Combination products (i.e. with integrated DVD player, VCR player / recorder, hard drive).
- Screen sizes under 28cm
- Television monitors (ie television display without a tuner) and computer displays

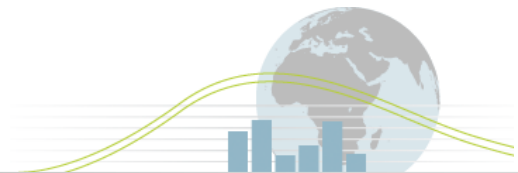
The detailed product definitions can be found at the Annex website:

<http://mappingandbenchmarking.iea-4e.org/>

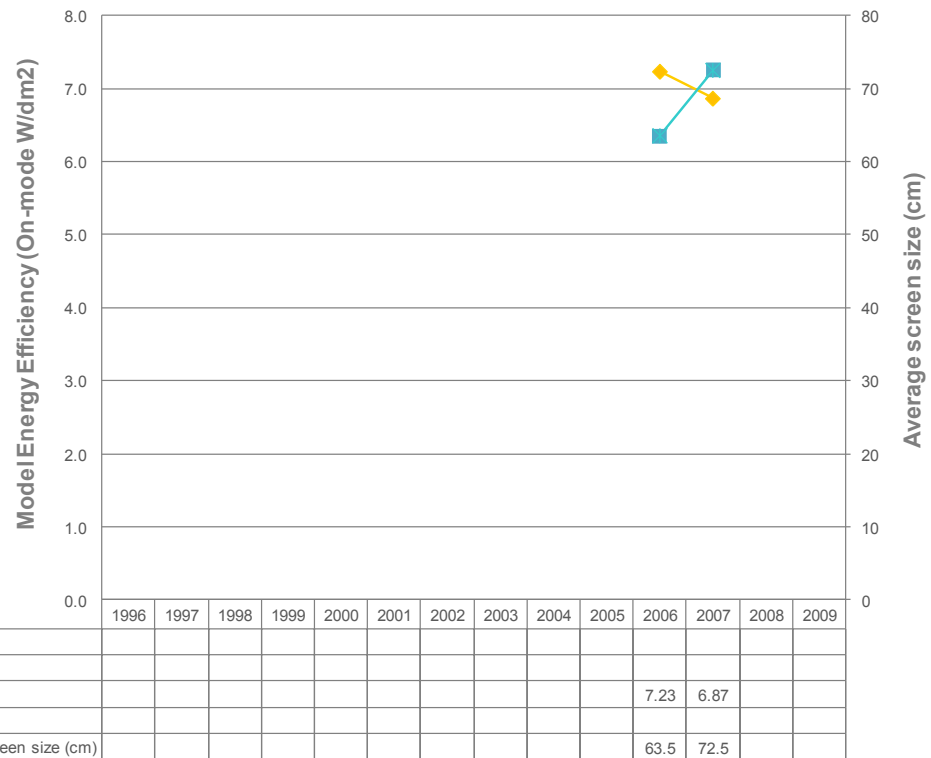
Issue date: October 10

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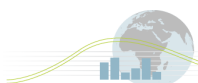


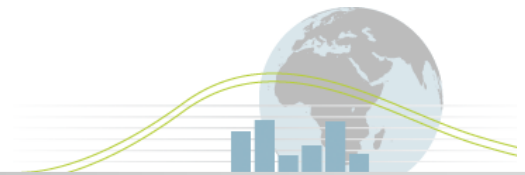
Energy Efficiency of New Televisions France



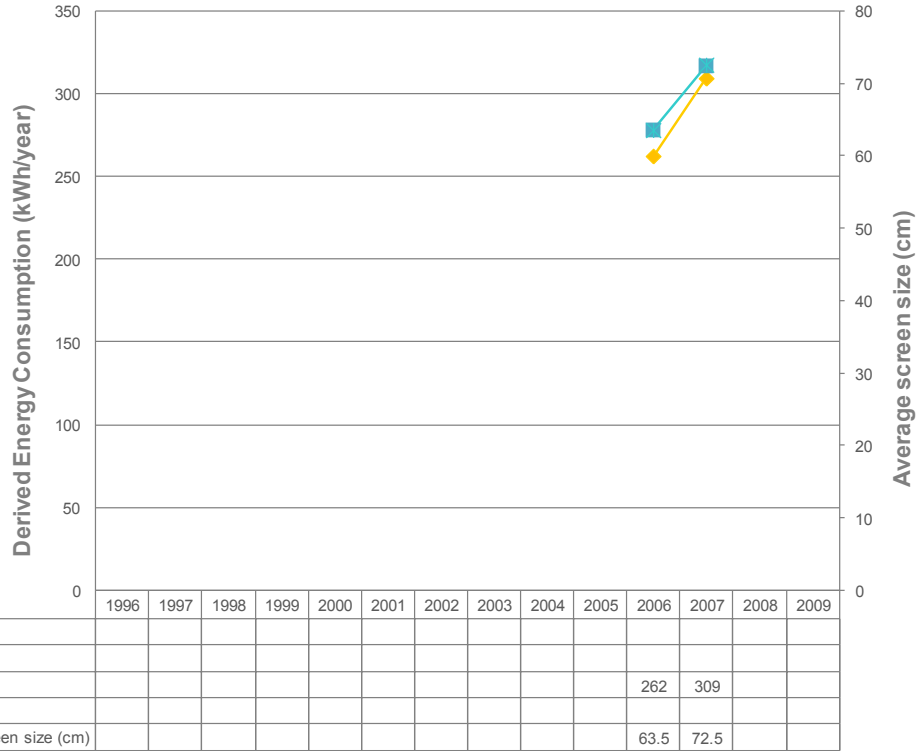
Key notes on Graph (see notes section 1)

- Graph is based upon on mode consumption only per unit screen area (W/dm^2) – does not include standby.
- Sales weighted screen size data is reasonably robust (GfK market sales data)
- Energy efficiency data is not robust. This is based upon manufacturers declared values, and not calculated from individual product data but from overview statistics (such as ‘number of CRT televisions consuming between 70W and 80W’ etc). Trends in efficiency may not be reliable.
- In the 2007 dataset, the sales weighted screen technology distribution was: CRT: 24%; LCD: 65%; Plasma: 10%; Other (incl. OLED): <1%.
- *Note: Analysis of product efficiency in the benchmarking part of this analysis (comparison between different countries) was based upon an Energy Efficiency Index (EEI), in preference to W/dm^2 . This was to enable fair comparison of efficiencies, since W/dm^2 data is highly dependent upon average screen size which varies between countries.*



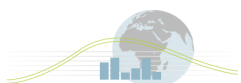


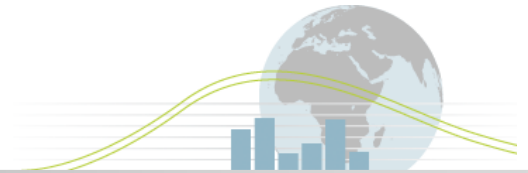
Energy Consumption of New Televisions France



Key notes on Graph (See notes section 2)

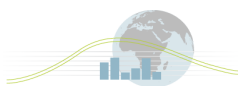
- Annual consumption is calculated assuming 1,820 hours per year (5 hours per day) in on mode, the remainder in standby, for 365 days per year.
- Close match between change in consumption and change in screen size is as might be expected, since most energy is consumed to illuminate the screen.

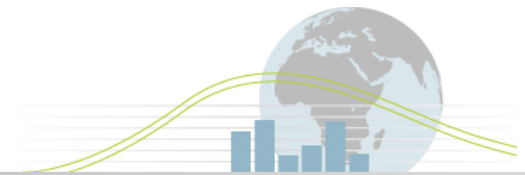




Energy Efficiency in the Installed Television Stock France

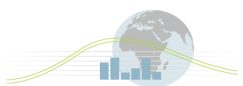
No data on typical televisions in French stock were available for analysis.

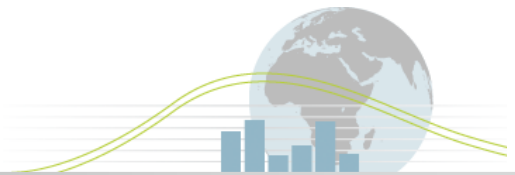




Energy Consumption in the Installed Television Stock France

No data on typical televisions in French stock were available for analysis.



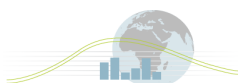


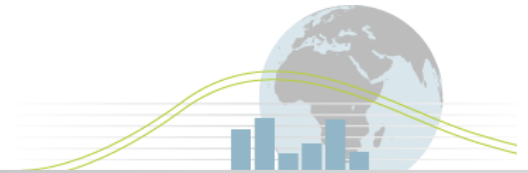
Major Policy Interventions (See notes Section 5)

No information was available on any national policies regarding televisions within France.

A European Eco-design directive regulation regarding televisions (EC 642/2009) came into force in August 2009 and sets Minimum Energy Performance Standards (MEPS) in two tiers, from August 2010 and April 2012. It also requires standby consumption to be less than 1W from January 2010, (2W if the standby state provides information or status display), reducing to 0.5W and 1W respectively from August 2011. It also requires an auto power down feature to automatically switch to standby after four hours from August 2011.

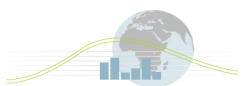
Tier 1 (2010 to March 2012), will remove from the market HD ready televisions of EEI 1.0 and above, and full HD televisions with EEI at above 1.07 to 1.11 (depending upon screen size). The Tier 2 MEPS from April 2012 will cover all televisions and will remove all televisions with EEI 0.8 or higher.

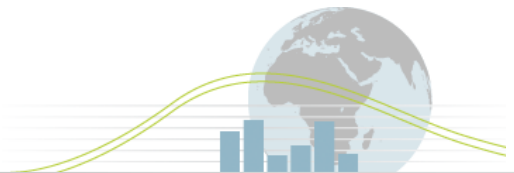




Cultural Issues (See Notes Section 6)

No cultural information was available.





Notes on data

Section 1: Notes on Product Efficiency

1.1 Test methodologies, Performance Standards and Labelling Requirements

No information was available on methodologies used to derive the data. Its source is point of sale data combined with manufacturers declared values, so power data is likely to be over-declared by some 20% to 30% (electrical safety data figures were probably used, and/or data measured with higher screen luminance levels than are required for European energy labels based upon test method IEC 62087).

1.2 Product Efficiency Graphic

Source: Market overview data was available for 2007 and 2006, from GfK. No data for individual products was included. The data consisted of sales figures for sub-divisions of the market such as: Sales of CRT televisions in screen size range 36-44cm, 45-55cm etc; similar (but different size categories) for plasma and LCD; CRT televisions with on mode consumption 30-200W, 200-300W etc; similar (but different consumption ranges) for plasma and LCD. These data were used to derive screen size and efficiency figures for each technology, and overall. Since assumptions had to be made on the average screen size and consumption figure within each category, accuracy of the derived data is less than might be expected from individual product data.

Key calculations undertaken:

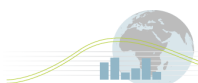
Calculating screen areas: Assumptions had to be made about the average screen size within each category of sales data. This was derived by calculating the screen area for the upper limit and the lower limit of each size category, and calculating the average of those two. Areas were calculated by the following process: Convert diagonal screen size to dm (divide by 10), square the number, then multiply by the factor below. In the absence of detailed data, the 'unknown' screen aspect ratio factor was used for the French data.

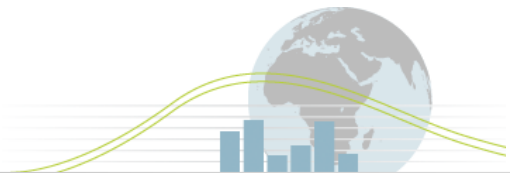
Aspect Ratio	Factor
16:9	0.427299703
16:10	0.449438202
4:3	0.48
Unknown	0.427299703

Note: For average screen diagonal calculations: The category 'CRT televisions screen size 36-44cm' was assumed to have an average screen size of 40cm; '56-70cm' to average 63cm; 'over 70cm' to average 75.1cm etc for size category and each technology.

Usage assumptions:

As no data specific to France were available on viewing hours per day, 5 hours per day were assumed in on mode with the remainder in standby. On mode consumption (W) is multiplied





by hours in on mode per year and divided by 1000 to get kWh per year. Standby consumption is calculated by multiplying the standby mode energy by the remaining hours in the year and again dividing by 1000 to get kWh per year.

Note that in practice a proportion of televisions will be disconnected from the mains supply (or in a 'hard off' mode), but the added complication of this calculation was not merited by the accuracy of data from any country (since standby accounts for only between 1% and 5% of annual consumption for most modern televisions).

Efficiency (kWh/dm²) is W in on mode, divided by screen area in square decimetres (dm, 1 dm = 10 cm). Average on mode figures for each size category in the data set were assumed, for example: Average consumption for the CRT category '30W to 40W' was 35W; for '110W and above' was 130W.

Sales Weighted Energy Efficiency of New Models: All of the data was sales weighted (no individual product data were available). Screen areas and performance data were weighted according to sales within each screen technology, then averages for each screen technology were weighted according to the proportion of overall market that was CRT, LCD and plasma to derive overall market average figures.

Model Weighted Energy Efficiency of New Models No individual product data were available so this could not be calculated.

Proportion of data set included:

All data provided were used except data for combination units (television with built-in video machine) and portable televisions (less than 25 cm screen sizes), as both of these are out of the project scope.

Section 2: Notes on Product Consumption

2.1 Test methodologies, Performance Standards and Labelling Requirements

Refer to section 1.1.

2.2 Product Consumption Graphic

Refer to section 1.2.

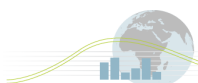
Section 3: Notes on Efficiency of Stock

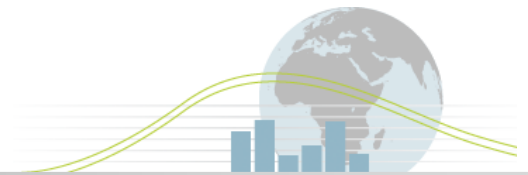
No data were available on the screen sizes of installed stock, and so no efficiency calculations could be performed.

Section 4: Notes on Consumption of Stock

No data were available on power consumption of installed stock.

Section 5: Notes on Policy Interventions





No information specific to France was available; policies described apply to the whole of Europe.

Section 6: Notes on Cultural Issues

No information available.

