



Ökodesign und Energielabel für TVs

Workshop «Steigerung der Energieeffizienz in dynamischen Märkten am Beispiel der Fernsehgeräte», 19.11.2008, Berlin

Grundlage der Präsentation:

- working document zu TVs, vorgestellt/diskutiert am 16.10.2008 im Ökodesign-Konsultationsforum

- feedback im KF





Scope

Grundlage:

working document, vorgestellt am 16.10.2008 im Ökodesign-Konsultationsforum

feedback im CF

- television set or a television monitor
- main issues in/after Ecodesign Consultation Forum on 16/10/2008:
 - » Professional displays in or out?
 - » Distinction between computer/professional well defined?



● Reference energy consumption

Approach:

- preparatory study: technology-independent function can be used to express the «on» power consumption – supported by all stakeholder/MS, but questioned by env NGOs
- function contains a constant element (tuner ...) and an element depending on the screen area

● Reference energy consumption II

- Data basis: data set provided by EICTA beginning 2008, including more than 100 individual TVs (both LCD and PDP)
- «On» power measurement carried out according to revised IEC 62087
- fit to data to determines the reference equation for power consumption as a function of sreen area

● Reference energy consumption III

- Result of fit to data:
 $15 \text{ W} + A \times 4.3224 \text{ W/dm}^2$ (A in dm^2)
- Result is similar to the suggestion of the prep. study for minimum requirement for HD ready TVs:
 $40 \text{ W} + A \times 4.26 \text{ W/dm}^2$

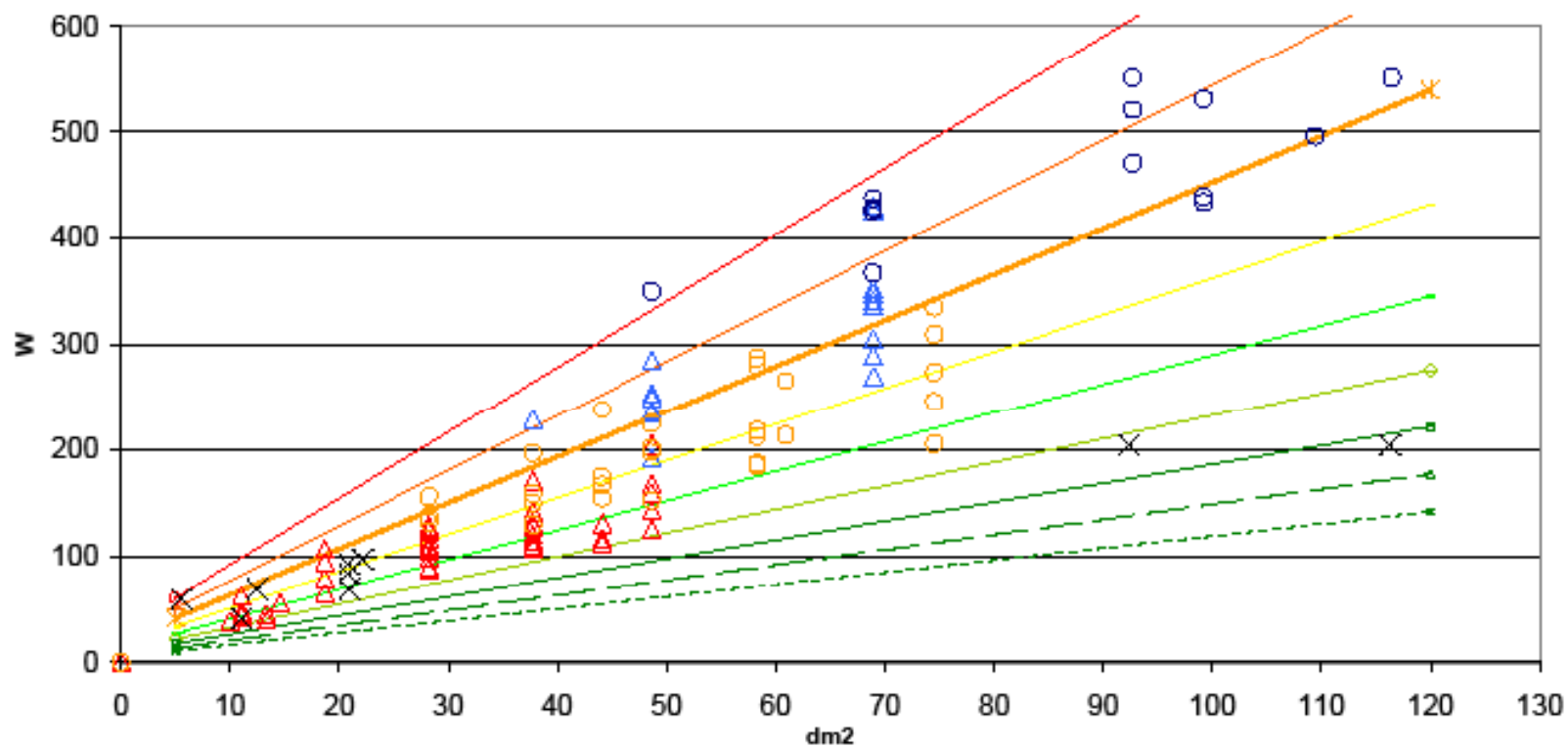
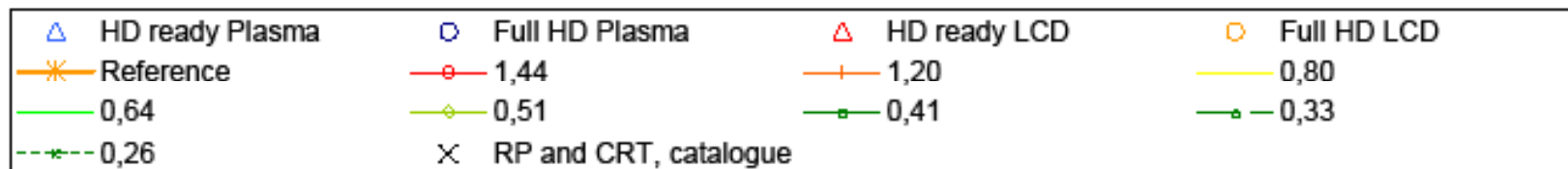
Main issues constant part:

- 20 W appropriate for sets? (EICTA: larger, DE: 30 W)
- 5 W appropriate for monitors? (EICTA: value for set minus 5 W)

● Energy efficiency index

- the energy efficiency index is the ratio between the measured «on» power consumption and the reference power consumption
- EEI is used to define the energy efficiency ranking/class
- bandwidth 20%: provides sizeable differentiation in terms of absolute energy consumption/money savings, also for the «more efficient» part of the scale
- Main issues: bandwidth appropriate? (EICTA: 15% for $EEI < 1$, 20 for $EEI > 1$)

Power consumption vs screen area (EICTA data): width 20%, fullHD=1,0, P_basic=20W



● Picture settings for measurements

- revised IEC 62087 does not contain a specification of the picture settings for measurement («out of the box condition», or «home mode» recommended by manufacturer)
- alternative option: set a minimum on the ratio between the luminance of the settings used for measurement («home mode», see below), and the maximum luminance
- Main issues:
 - » provision for ratio of brightness setting widely supported, although EICTA does not see risk for unfair competition
 - » Suggestions for appropriate levels range approx. from 60-80%

● Labelling

Two scales

- energy efficiency ranking: absolute, remains fixed
- energy efficiency class: relative, upgrades

(final approach on design of label depends on the outcome of the «horizontal» discussions on energy labelling in EELEP – labelling formation)

● Labelling II

Time horizon:

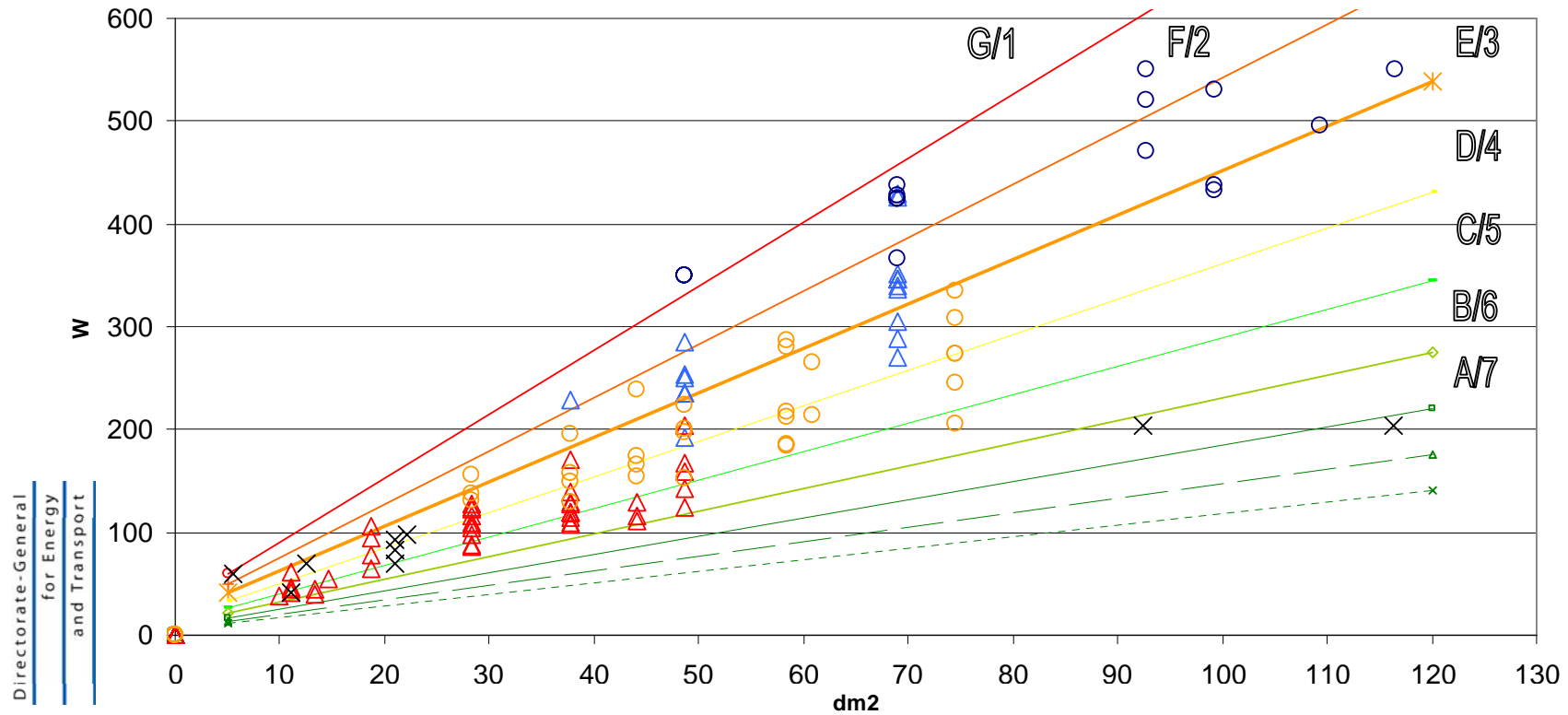
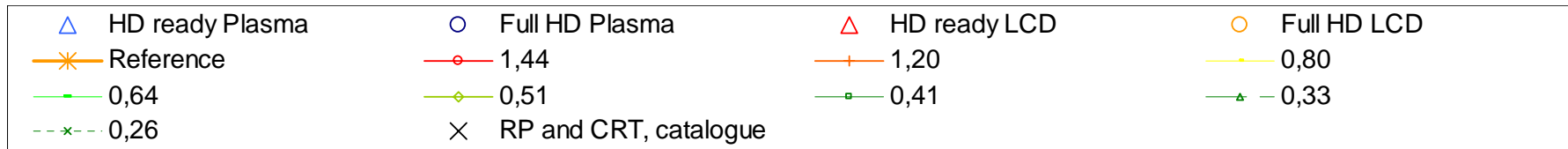
- three upgrades of energy efficiency class by one energy efficiency ranking each
- two year intervals
- Start of label: $EEl=1$ is the threshold between classes D and E

Rationale:

- setting medium-term benchmarks provides clear and predictable legal framework for investments, product development ...
- TV market rapidly evolving, frequent upgrade appropriate, improvements of energy efficiency feasible



Power consumption vs screen area (EICTA data): width 20%, P_basic=20W



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● Labelling III

Main issues

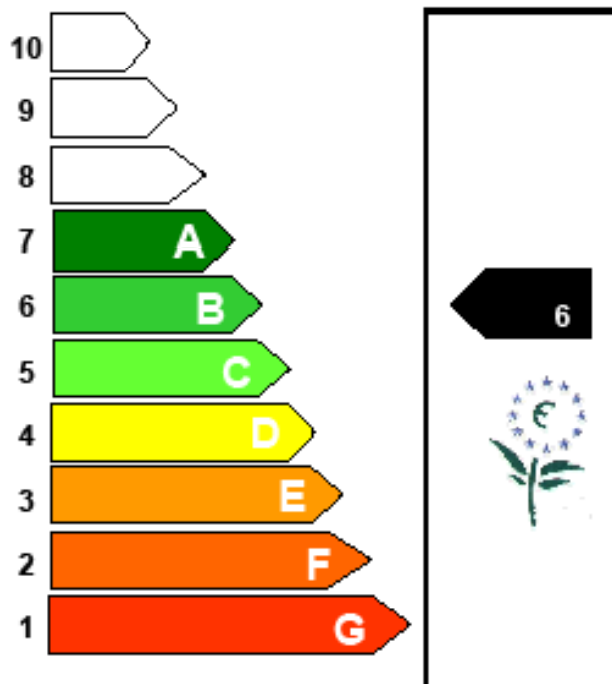
- Time horizon/mid-term perspective supported by most, but EICTA suggests review mechanism
- Two year intervals supported by most, but DE suggests 3 years



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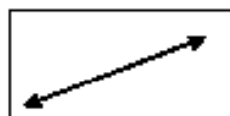


Manufacturer/Model



Watt 180

kWh per annum 263



107 cm
42 inch

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● Ecodesign requirements

Approach

- Two stages in two year intervals for «on» power consumption
- Revision after 4 years of entry into force of measure
- 1st stage: distinction between full HD and HD ready
- 2nd stage: no distinction between full HD and HD ready
- reduction by 20% (EEI=0.8) for the 2nd stage for HD ready, and 30% for full HD

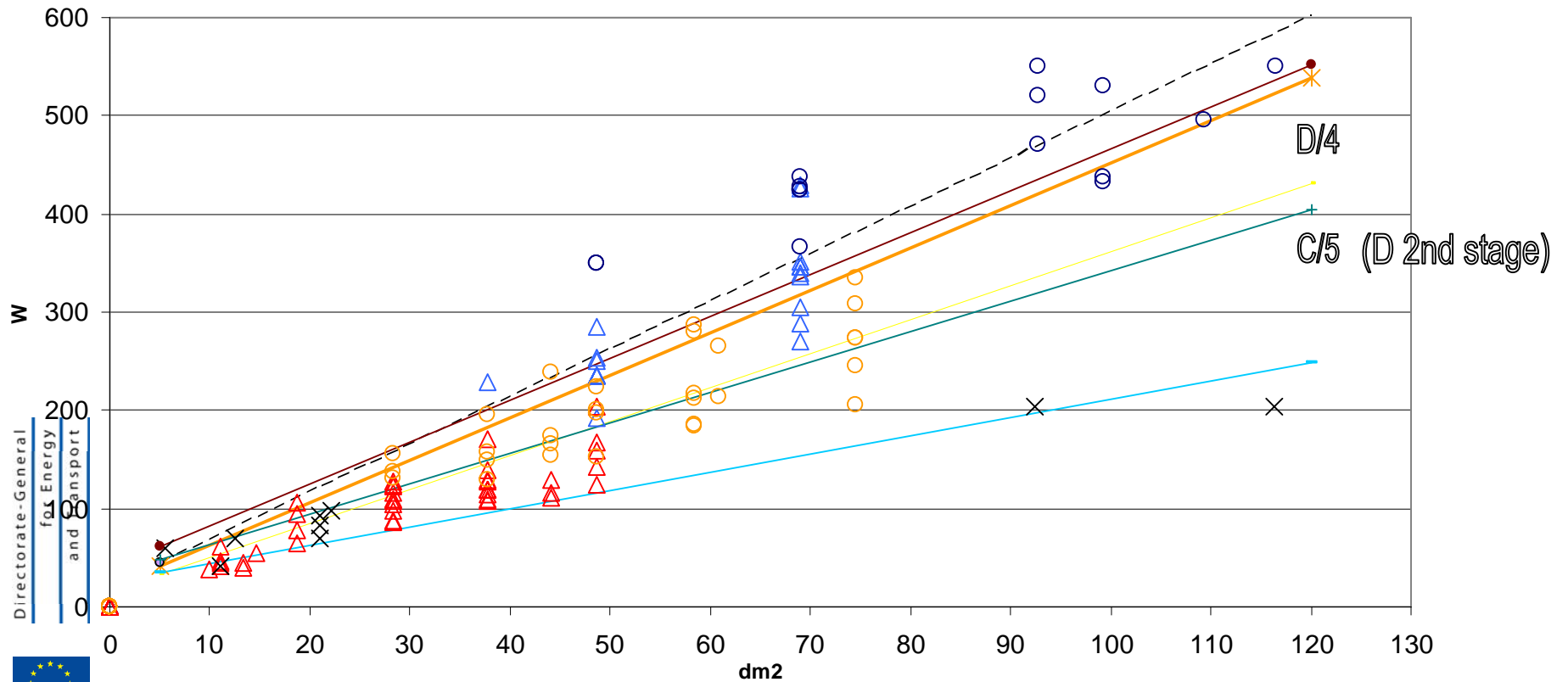
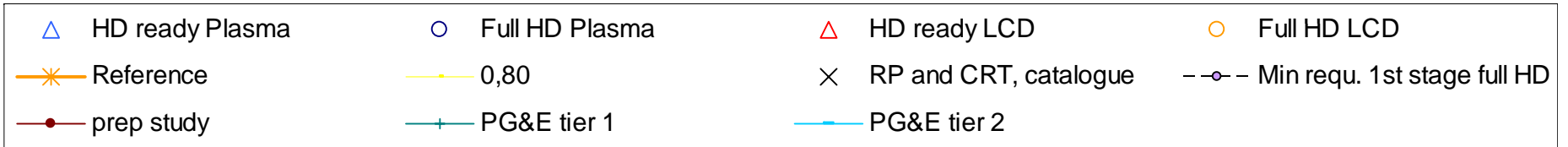
● Ecodesign requirements II

Main issues:

- Approach supported by most but
 - » Env NGOs: not aggressive enough (California more aggressive?)
 - » EICTA: too aggressive, stage 2 to be based on new market review
 - » additional requirement for auto power down seems to be supported by many



Power consumption vs screen area (EICTA data): width 20%, P_basic=20W





Next steps

Additional written input from stakeholders, if any, to be submitted right away – deadline of three weeks after the meeting, cf Commission Decision 2008/591/EC on CF, already elapsed

Targets:

Launch ISC: end December

Reg. Committee: early 2008