Working with stakeholders:
Communicating with consumers, industry, test laboratories and other stakeholders

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Stockholm, Sweden
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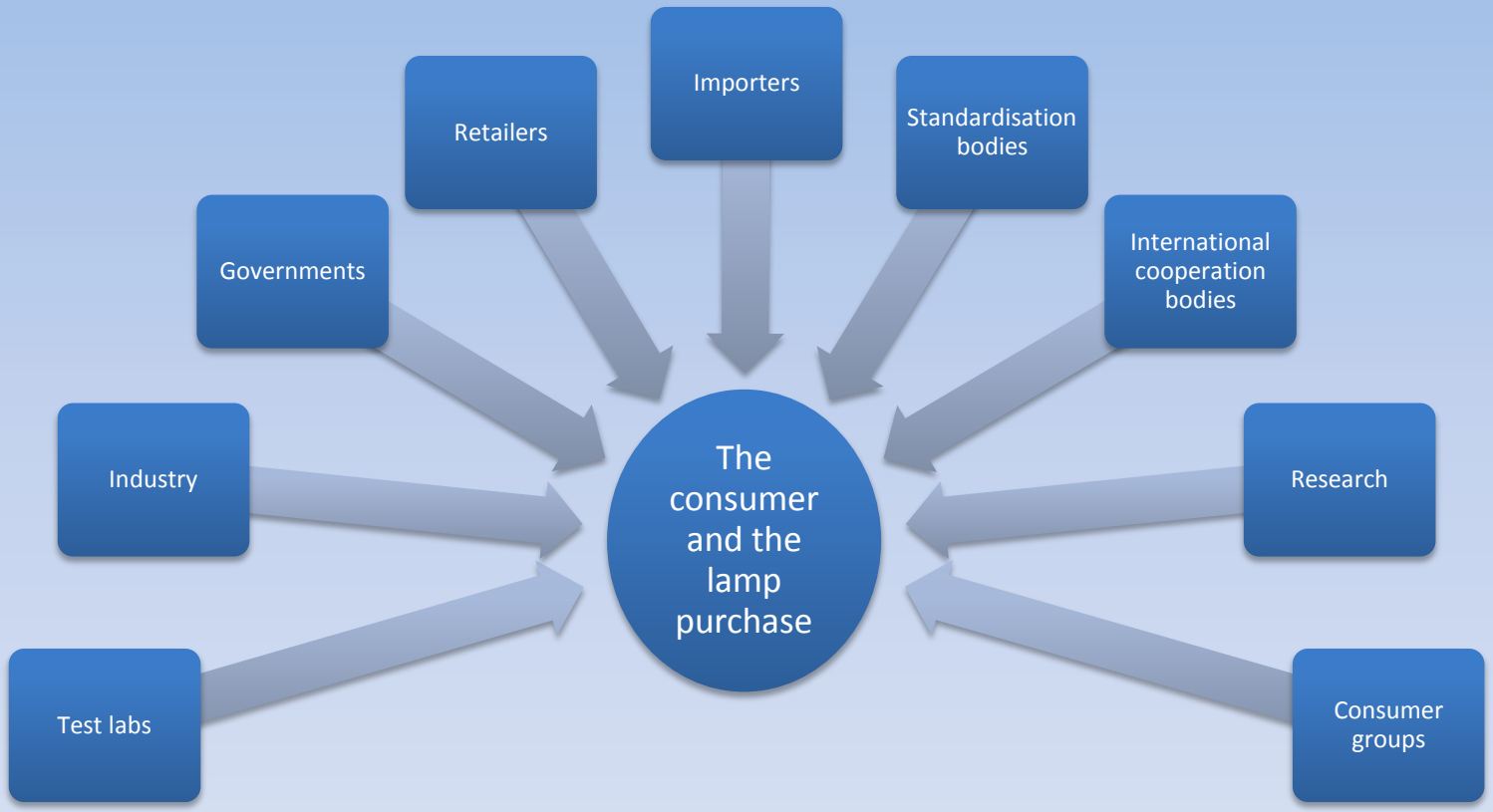
Asia-Pacific Economic Cooperation

B ● R G ● C ●

Australian Government
Department of Climate Change and Energy Efficiency

How many … does it take to replace a bulb?



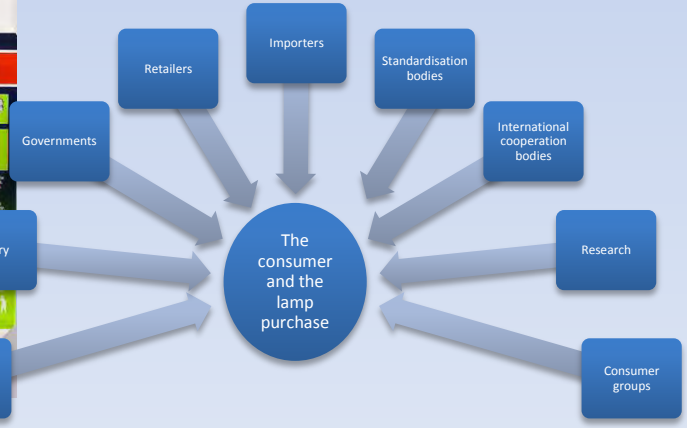
Information to consumer is not just - information

- Primary focus for this talk is consumer information
- Lamp packages, etc.

  → BUT: All actors in the chain need to understand and agree (or at least comply) with what is being told

So in order to get the package right…

All of these needs to get it right



The Scope of information on packages

- Primarily consumer information, but some of the information is very useful for commercial and OEM buyers as well
- Consumer information is competing with brand information and manufacturers' own way of explaining things
- There is *mandatory* and *voluntary* information
- Even voluntary information can be subject to regulation and agreements (CF EU ecodesign requirements for lamps).
- All labelling and marking needs specification, testing and verification.
  - → Not only to verify the product to understand what we are talking about

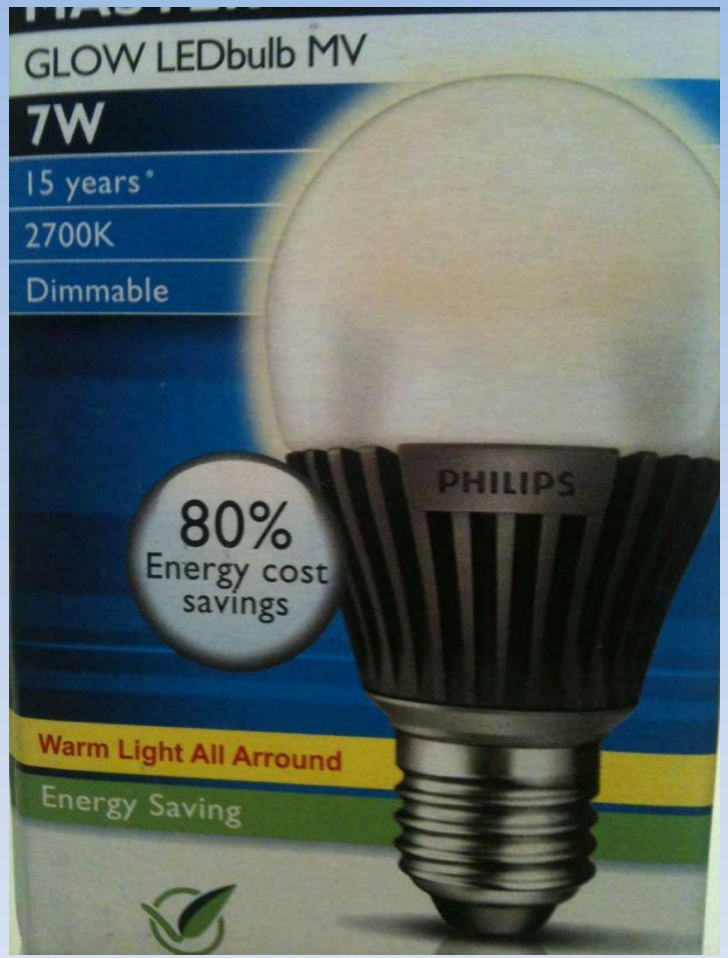
Labelling, Packaging and Marking – What is the Difference?

- The following definitions are used here:
  - **Comparative Labelling**: Some method of demonstrating the relative performance of a lamp
    - X is “better” than Y which is “better” than Z
  - **Endorsement Labelling:** Some method of demonstrating the product has passed some absolute level of performance
    - X is “good”
  - **Packaging:** Requirement for other specific information to be displayed on the product package.
  - **Marking (on the lamp):** Some method of marking the product (and with some or all of the information repeated on the packaging) to demonstrate compliance with predefined criteria

It was already difficult – even more so with LEDs!

- LED industry originally no lighting business
  - Various ways to define how much light an LED produced
  - Little understanding of basic lighting parameters
- Example: Color temperature
  - Warm white 2700 – 3000K
  - But a halogen lamp with 3000K can be marketed as a lamp with “crisp light”, alluding to its cooler light. But it is still warm!
- Perhaps a combination of minimum quality requirements and simplified information on the packaging can work?
- Standards can replace the need for some information and make it easier to focus on other important issues needed to overcome consumer hesitance
- EU faces big challenge in introducing requirements for directional lamps

Example of incandescent replacement LED-lamp



Example of incandescent replacement LED-lamp (2)

Packaging: comparing light output, life and money saved

The big question: How do we compare light output when there are no more GLS lamps left for reference?

- Lumens?

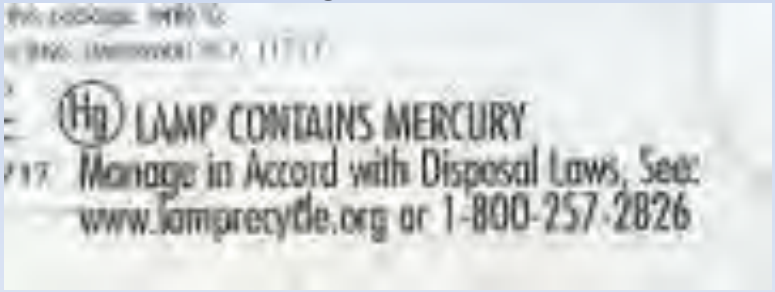
- A combination of lm and W?

Packaging: explaining what sort of light colour, application etc…

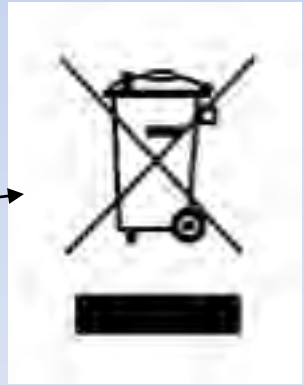
Mandatory information that needs to be there (some of this also appears as marking…)

CE says it fulfills all manadatory requirements (EuP, EMC, etc. etc)

US says: Hg, treat according to law…



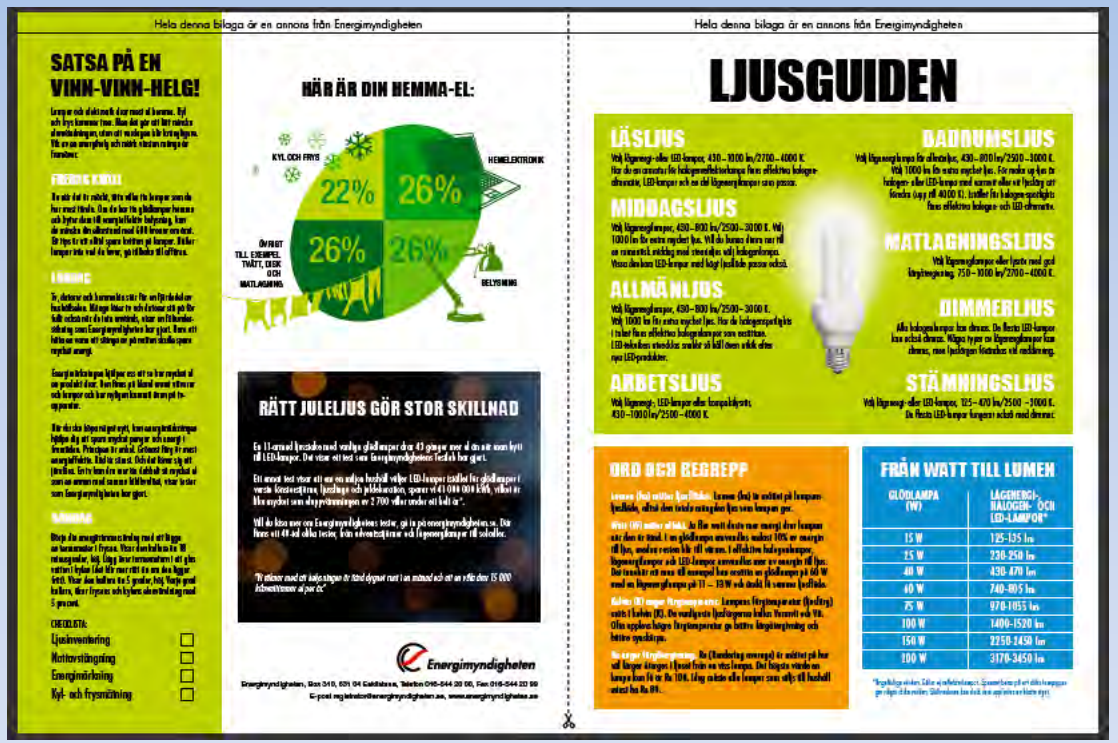
WEEE says: Don't throw in the dustbin



And sometimes the information is too complicated

Sweden: A comprehensive example

- 8-page newspaper supplement to go in all newspapers (Nov 2011)
- 60-W incandescent (by far most common) is being phased out
- Much less focus on consumer finances



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CHECKLISTA:
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- Mattorstängning
- Energimärkning
- Kyl- och frysmätning

HÄR ÄR DIN HEMMA-EL:

RÄTT JULELJUS GÖR STOR SKILLNAD

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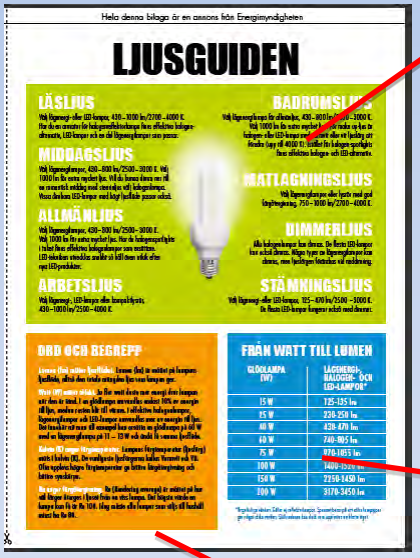
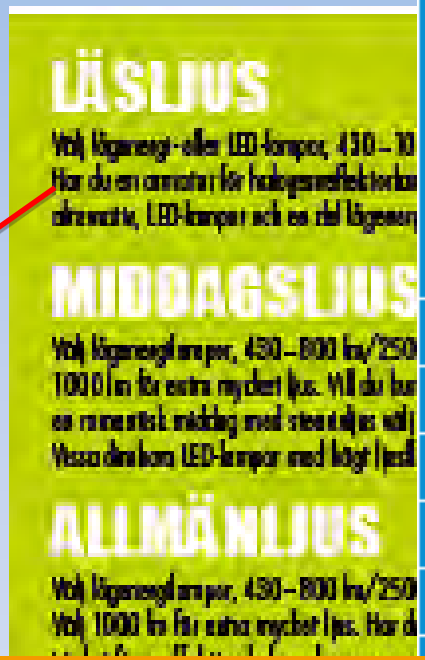
ORD OCH BEGREPP

FRÅN WATT TILL LUMEN

GLÖDLAMPA (W)	LÅGENERGI-, HALOGEN- OCH LED-LAMPOR*
15 W	125-135 lm
25 W	230-250 lm
40 W	430-470 lm
60 W	740-805 lm
75 W	970-1055 lm
100 W	1400-1520 lm
150 W	2250-2450 lm
200 W	3170-3450 lm

- Guide to cut out and bring to the shop
- First attempt to market lumen instead of watt.
- Recommendations are based on Kelvin and lumen for various situations





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irliga värden. Gäller ej reflektorlampor. Spannet beror på att olika lamptyper
got olika värden. Skillnaderna kan dock inte uppfattas av blotta ögat.

ORD OCH BEGREPP

Lumen (lm) mäter ljusflödet. Lumen (lm) är måttet på lampans ljusflöde, alltså den totala mängden ljus som lampan ger.

Watt (W) mäter effekt. Ju fler watt desto mer energi drar lampan när den är tänd. I en glödlampa omvandlas endast 10% av energin till ljus, medan resten blir till värme. I effektiva halogenlampor, lågenergilampor och LED-lampor omvandlas mer av energin till ljus. Det innebär att man till exempel kan ersätta en glödlampa på 60 W med en lågenergilampa på 11 – 13 W och ändå få samma ljusflöde.

Kelvin (K) anger färgtemperatur. Lampans färgtemperatur (ljusfärg) mäts i kelvin (K). De vanligaste ljusfärgerna kallas Varmvit och Vit.

Only possible with common, agreed definitions and descriptions. But the solution can be tailored to the circumstances

Some experiences (not yet from consumer)

- Very difficult to get marketing people understand light and lighting
- Government takes a leading role and expertise is needed in client role
- How much do you highlight LED products that are still very expensive?
- Will people understand lumen? And if so when?
- Very difficult to understand heat (power) vs lumen in terms of maximum allowed power in a luminaire

Conclusions

- Information to consumers must be reasonably harmonised
- Information must be accurate and relevant
- Information must always be simplified. But simplification helps to create order in chaos

BUT:

- Not only consumers need to understand:
- Governments, regulators need to understand technology and standards – what they can achieve and what they can't
- Mandatory regulation can reduce need for information
- Retailers, importers etc need to understand what the purpose of the information is
- Test labs need to understand the purpose and scope of regulation
- Industry must understand what is being regulated, how and why?

Thank you!

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PAPER FROM:

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