

# First findings and recommendations

## Review Energy Labelling and Ecodesign Directives

### Third stakeholder meeting

18/02/2014

Edith Molenbroek, Corinna Fischer, João Fong,  
Sophie Attali, Paul Waide,  
Juraj Krivošík, Heleen Groenenberg

# Topics to discuss

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1. Have the objectives of the Energy Labelling and Ecodesign Directives been met by the delegated acts and implementing measures adopted so far?
2. Should the scope of Energy Labelling and Ecodesign be expanded? If yes, how?
3. How do Energy Labelling, Ecodesign and other policies interact?
4. Has the current energy label been appropriate for its purpose?
5. How could the rulemaking procedures for Energy Labelling and Ecodesign be improved?
6. What are experiences to date with market surveillance and standardization related to Ecodesign and Energy Labelling?
7. Other aspects (questions from participants)

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Sophie Attali

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## Objectives and market effects of Energy Labelling and Ecodesign

18/02/2014

Heleen Groenenberg

# Objectives of Energy Labelling and Ecodesign

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- > Overall objectives:
  - contribute to 2020 energy savings target;
  - possibly reduce environmental impacts in use phase (ELD), over life cycle (ED)
  
- > ELD/ED are capable of generating substantial savings cost-effectively
  - 2020 projections of savings add up to 400-460 TWh electricity, and 2350 PJ<sub>prim</sub> heat(from BaU), both -13%

# Energy savings realized

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- > Literature review and consultation have not resulted in a thorough understanding of the amount of energy savings
  - from ELD/ED framework as a whole
  - by ELD framework and ED framework separately
  - that could be achieved were more products to be addressed
  
- > Parallel study for EC will streamline scenario analyses supporting individual measures

# Level of ambition could be raised

	<b>Industry</b>	<b>Gov bodies</b>	<b>Other</b>
Non-directional lighting	too high	correct	correct
Water heaters, directional lighting	correct /too high	correct /too low	too low
Boilers standby & off-mode, external power supplies, circulators in buildings, simple set-top boxes	correct	correct	correct
Room air conditioning, fans, domestic refrigerators, washing machines, dishwashers, laundry driers, water pumps	correct	correct /too low	too low
Electric motors, vacuum cleaners	correct	too low	correct
Tertiary lighting	correct	too low	too low
TVs	correct	(much) too low	(much) too low
PCs/servers, complex set-top boxes, imaging equipment	correct /too low	correct /too low	(much) too low

# Several factors limit capturing full potential of savings

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## > Stakeholders mention:

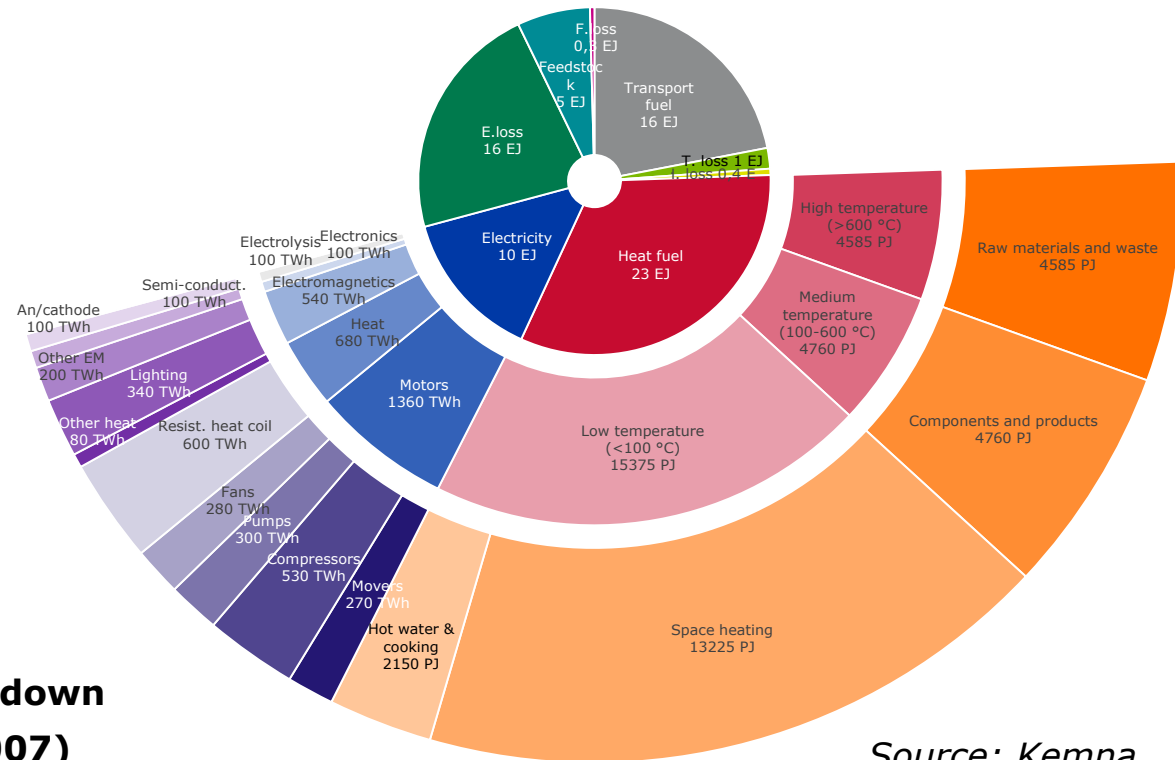
- Long rulemaking process (outdated prep, lobbying)
- Weak enforcement
- Ineffective labels following introduction A+ and up; inclusion of categories banned under Ecodesign
- Larger products

## > Furthermore:

- B2B products not labeled
- Inaccurate assumptions in modeling of savings
- Requirement to consider e.g. affordability, functionality of products, or competitiveness and jobs

# Potential energy savings future regulations

- > 80-90% of final energy consumption dealt with by measures or subject to preparatory study
- > Routes to further savings:
  - Revision of measures
  - (Greater) coverage of
    - ELD (e.g. B2B)
    - Product systems
    - ErP



**EU energy consumption, breakdown by function, energy carrier (2007)**

Source: Kemna



# Product systems

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- > Very substantial saving potential mostly related to interaction of system components → optimize systems (for motors e.g. sizing, pipes/ducts, gears/transmissions, efficient end-use equipment, VSDs)
- > Three levels in MEErP: individual product, extended product, system
- > Challenges
  - Systems as such are not regulated, although potential savings of extended products and systems are considered (e.g. package label; motor systems)
  - Market surveillance needs to cover full distribution chain
  - Additional policies required (e.g. requirements EPBD, regulating management processes, training)
- > Good product policy must
  - Consider system and mode in which a product will be applied
  - Be careful not to ban products that would be optimal for certain systems
  - Not overestimate systems savings
- > Explore extended product approach, package label, bonuses for systems savings more systematically

# Other environmental impacts

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- > ELD: use phase; ED: life cycle
- > Recently more focus on resource efficiency in EU policy documents
- > Methodologies for assessing resource efficiency aspects under development
  
- > Requirements ED: improvement potential, cost-effectiveness, absence other legislation
- > Addressing other environmental impacts not always cost-effective to consumer (though possibly to society), often other legislation in place (WEEE, ROHS, REACH – though these may address other products, life cycle phases, or impacts)
- > → case-by-case assessment, possibly leading to inclusion of
  - ErP with small improvement potential (phones, tablets)
  - further non-energy aspects
  - non-ErP, in the context of scope expansion (e.g. motorized road transport, food, paints, etc)
- > Well established for noise and water consumption, but no comparative scale

# The primary energy factor

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- > EU-wide PEFs result in the energy use of electric appliances multiplied by 2.5. They may complicate the electrification needed for deep GHG reductions, disregard national differences in energy mix, and force consumers to compare products they would not consider as alternatives.
  
- > Use of a primary energy factor is recommended because this
  - supports comparability and technology neutrality
  - is consistent with the use of a PEF under the EPBD
  - multiplies realized efficiency savings for electric products
  
- > An EU wide PEF should be established because
  - Cross-border sales cannot be avoided
  - Cross-border consumption of energy from renewable sources
  - Cost of 28 national labels would be cumbersome and costly
  
- > The PEF should be made dynamic, or be reviewed frequently
  
- > Lock-in in gas technology can be avoided by policies targeting energy mix

# Market effects of Energy Labelling and Ecodesign

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- > Economic effects from the implementation of all products from the First Working Plan:
  - Projected net savings €90 bln/yr by 2020 (1% current GDP), €280 per household
  - Reinvesting savings may generate 1 mln jobs
  - Energy imports reduced by 23% and 37% for gas and coal

*(Source: Molenbroek, 2011)*

# Market effects of Energy Labelling and Ecodesign

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- > Benefits from ELD/ED are perceived to outweigh costs, both for organizations and for society, though some report that profit margins have been under pressure following increased costs
- > ELD/ED had little perceived impact on overall market sizes/structures, or product choices
- > Impact of ELD/ED on competitiveness was perceived as positive (esp for labelling of domestic appliances)
- > Impact of ELD/ED on innovation was perceived as positive across product groups (esp labelling of domestic appliances)
- > Impact of ELD/ED on SMES is generally considered positive, though limited capacity to ensure compliance may be a risk

# Conclusions and recommendations

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- > ELD/ED are capable of generating substantial savings cost-effectively
- > 2020 projections of savings add up to 400-460 TWh electricity, and 2350 PJ<sub>prim</sub> heat (from BaU), both -13%
- > Level of ambition could be raised due to long rulemaking process, weak enforcement, ineffective labels, trend towards larger products
- > Further savings may be realized through a revision of measures, and a (greater) coverage of ELD (B2B), including product systems and more ErPs.
- > Regulation of product systems through product policies should be explored more systematically (extended product approach, package label, bonuses for systems savings)
- > Inclusion of environmental impacts should be evaluated on a case-by-case basis, and consider cost-effectiveness as well as coverage by other policies
- > An EU-wide primary energy factor is recommended for products with the same function but based on different technologies/energy carriers
- > Benefits from ELD/ED outweigh cost, and impacts on competitiveness and innovation are perceived positively.

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## Interactions of Energy Labelling and Ecodesign with other EU policies

18/02/2014

Edith Molenbroek (replacing Corinna Fischer)

# Key issues addressed

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## > **Types of relations examined:**

- Overlaps
- Conflicts and misfits
- Synergies and complements
- Gaps

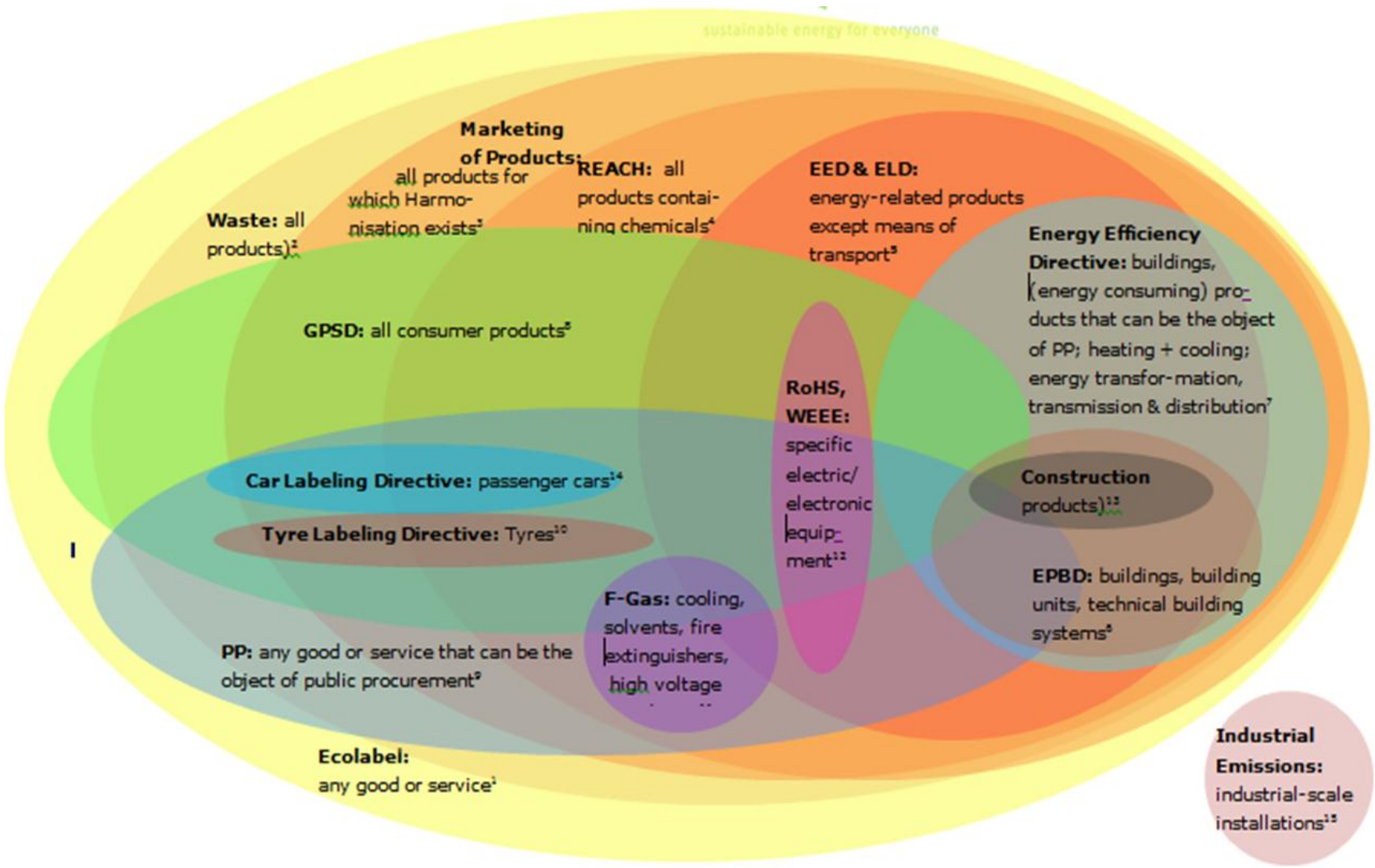
## > **Levels of analysis** (in green below: focus of today's presentation)

- Theoretical level (potential conflicts etc.; derived from policy scope and mechanisms; level of framework directives)
- Actual level (recent examples; level of product-specific regulations and procedures) Sources: Online survey; stakeholder input

## > **Recommendations**



# Product Scopes



# Analytical framework for identifying synergies, conflicts, misfits or gaps

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- > Potential synergies:
  - Complementary products, sustainability aspects or life cycle stages addressed
  - Complementary actors addressed
  - Complementary policy mechanisms (e.g. push and pull)
  - Shared information basis
- > Potential conflicts:
  - Conflicting requirements
  - Conflicting mechanisms or strategies (e.g. allowing national variation or not)
- > Potential misfits:
  - Badly aligned requirements; often due to
  - Badly aligned timing, procedure or benchmarks
- > Potential gaps
  - Overlap of scope that invites “passing the buck”

# Stakeholder Input I: General Issues

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- > Misfit in requirements due to misaligned timing and information sharing
  - Between ED and ELD: leading to empty classes at the bottom
  - Between ED/ELD and Ecolabel: Ecolabel awarded to class B TVs
- > New material requirements under RoHS and REACH might hamper energy efficiency
  - **Consultant comment: No concrete examples have been brought forward**
- > PEF (Product Environmental Footprint), if made mandatory, could lead to proliferation of labels, and thereby hurt the energy label
- > ED and ELD savings not eligible for national savings targets under EED => governments discouraged from supporting ED / EL measures
  - **Consultant comment: not clear what is meant**

# Stakeholder Input II: ED / ELD and EPBD

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- > General comment: Optimizing individual product might be to the detriment of system performance
  - But no concrete examples have been brought forward
- > Positive / synergy: ED and ELD address environmental issues that EPBD does not address (noise; air pollutants...)
- > Calculation methods not well aligned
- > Design and class names of Energy Label and Building Certificate should be aligned; else potential for confusion)
- > Energy Label for space and water heaters superfluous because Building Certificate covers most relevant impacts
  - Consultant comment: Energy Label is relevant in retrofit situations, EPBD does not cover emissions
- > ED does not allow for more ambitious national standards for boilers.
  - Consultant comment: fixed through an amendment to ED in the EED (under EPBD, MS may limit installation of products that are in compliance with ED).

# Stakeholder Input III: Individual Products (1)

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- > **Construction products:** sufficiently covered by CPR
  - Consultant comment: Currently no minimum requirements, only information requirements under CPR. To discuss whether to best introduce minimum requirements under CPR or ED.
- > **Large Power Transformers:** ED requirements might lead to taking low-carbon power plants out of service for some time and therefore harm climate policies
  - Consultant comment: validity check for this argument necessary (balance of costs / benefits)
- > **Tyres:** Additional bans under REACH may have strong impacts on design, fuel efficiency and safety. Predictability of substances targeted under REACH desired.
- > **Fans:** system aspects are not always taken into account correctly, e.g. efficiency requirements do not completely reflect fan performance in real installations

- > **Integrated workplan, evidence base (prep studies) and decision procedures**
  - Ecodesign workplan officially to become ED and ELD workplan
  - Preparatory studies also to be used as evidence base for other policies such as Ecolabel, RoHs, the F-Gas regulation, or CPR
    - In prep study, integrated assessment of all relevant environmental aspects
    - Integrated policy assessment (see next bullet point)
- > **Integrated policy assessment to improve task sharing of policies**
  - Include in MEErP more detailed, systematic and consistent methodology for analysing regulatory coverage, overlap, and potential synergies
  - Derive, in prep studies, recommendations for combining policies
  - If possible, streamline revision cycles for these policies
- > **Adjust criteria and requirement levels**
  - E.g. Ecodesign minimum standard = generally lowest energy class; Ecolabel and GPP = generally highest energy class

- > **Streamline conformity assessment and market surveillance procedures as well as documentation requirements**
  - E.g. unified documentation format for all policies that affect a product; both regarding documentation used for market surveillance and „product fiches“ directed at the consumer

## > **Mergers should depend on practical considerations**

- Various mergers suggested by stakeholders
  - ED and ELD
  - ELD and Tyre Labeling
  - Various product legislations (e.g. ED, RoHS) or various energy-efficiency legislation (e.g. ED, ELD, EPBD, EED)
  
- ED and ELD merger pro`s: Better coordination, leaner procedures
- ED and ELD Merger con`s: Too complex, scopes and mechanisms not identical, „Lisbonization“, Not necessary
  
- Conclusions:
  - Most important that policies are coherent, mutually supportive, represent a clear task sharing, and procedures streamlined
  - Whether or not a merger would support this goal, is a legal /practical issue



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## Potential scope expansion to non-energy related products and means of transport

18/02/2014

João Fong

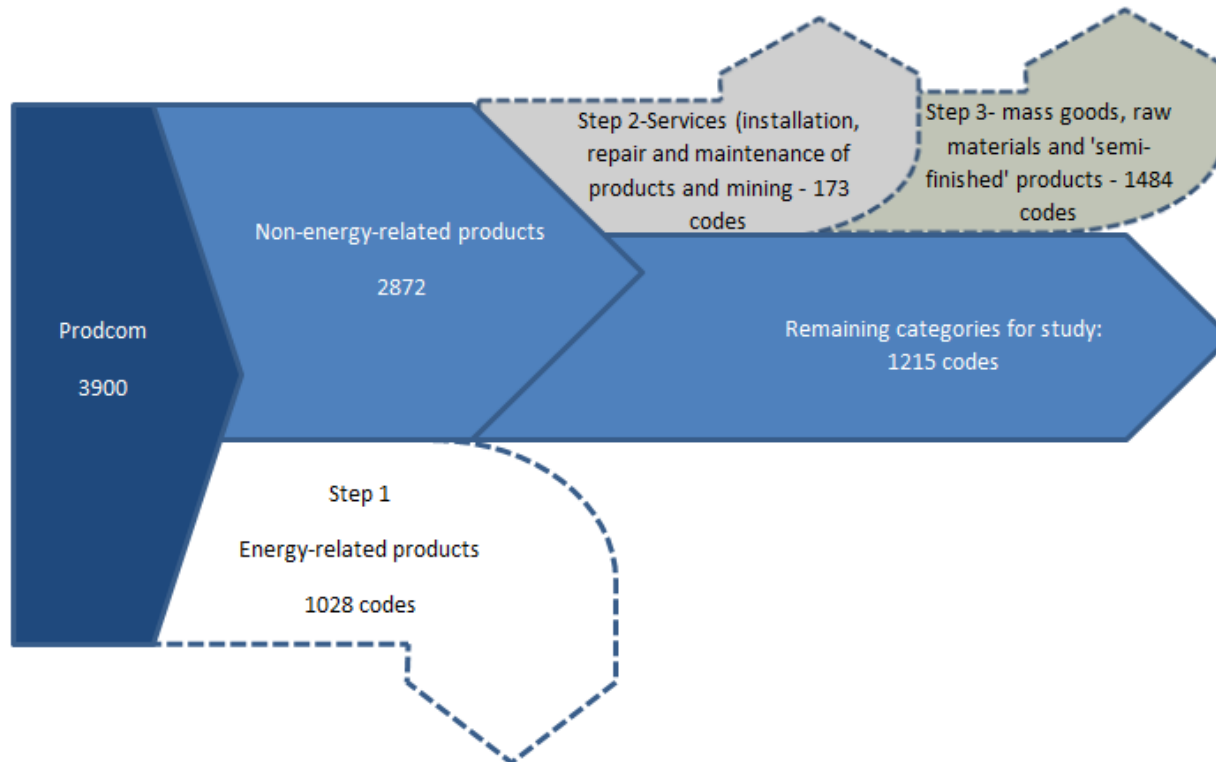
# Objectives

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- > The primary objective of Task 3 is to evaluate the appropriateness and feasibility of laying down Ecodesign and Energy Labelling requirements for non-energy-related products and means of transport under the EL and the ED Directives.

# Methodology

- > Reduce the Prodcom list;
- > Aggregate the remaining product groups to form higher-level categories;
- > Refine / modify the list using other categorizations such as COICOP, or categorizations used in other studies (EIPRO, 2006, CSES, 2012);



# Methodology

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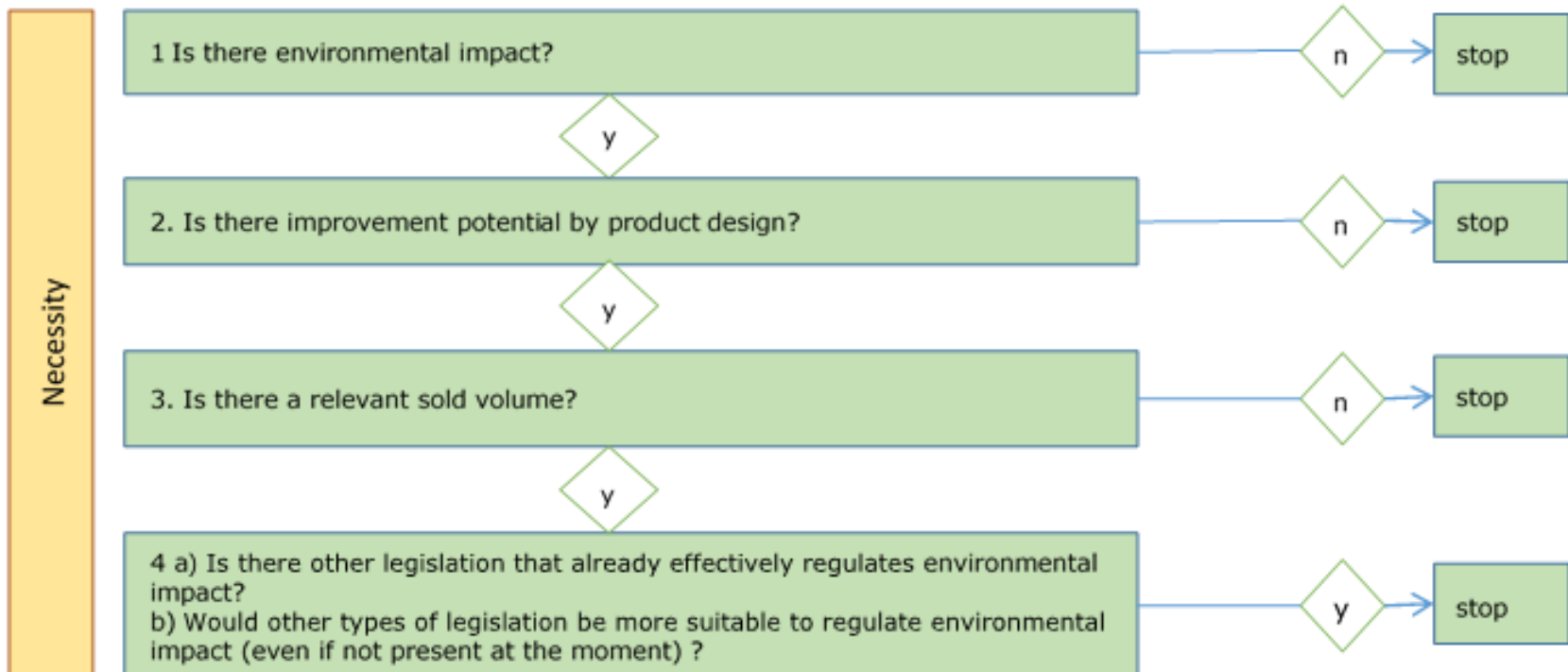
The 1215 categories were then aggregated to form higher-level categories, based on primary product function and ranked through a scoring system based on:

- an assessment of market size (especially if expressed in other terms than unit sales)
- a first rough (and, if necessary, qualitative) assessment of environmental impact and improvement potential, based on literature
- a first rough assessment of suitability for Ecodesign and Labelling legislation (as opposed to alternative instruments or voluntary initiatives);
- a first rough assessment of the feasibility of Ecodesign and Labelling legislation (data availability, methodological and verification issues);
- a first rough assessment of the possible costs / risks and benefits of Ecodesign and Labelling legislation (bureaucratic / cost burden, risks to the existing process, consumer benefit / acceptance).

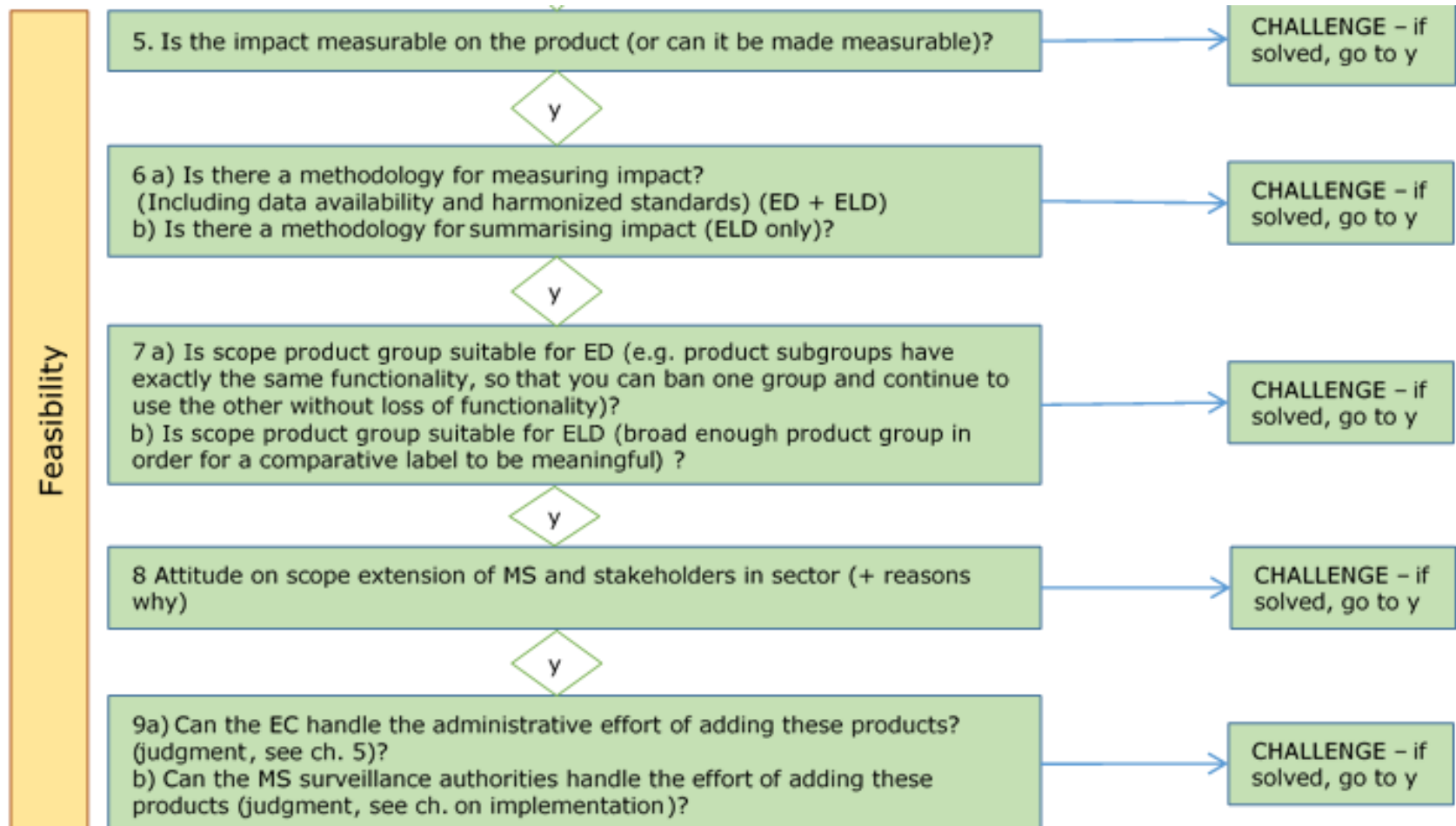
For each of the above criteria points were awarded (0, 1 or 2) and products ranked accordingly.

- > The initial ranking was refined based on additional research, and on results from case-studies.
- > There is a need to consider three main issues in the selection of products to be covered: necessity, feasibility, and added value.
- > Decision tree to help in the evaluation was developed.

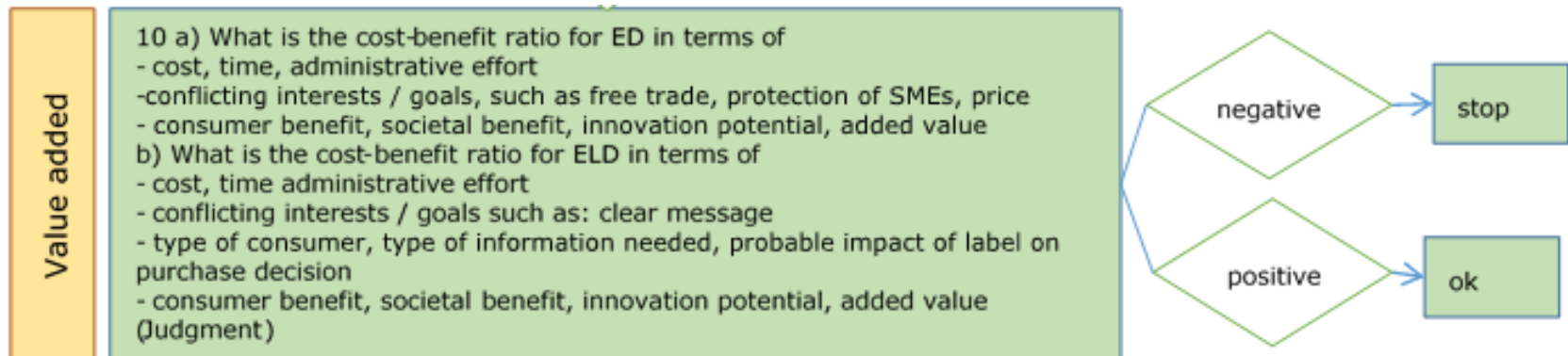
# Methodology



# Methodology



# Methodology





# Conclusions - General

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- > Significant environmental impact and improvement potential has already been identified by previous studies for some product groups.
- > Most of the identified improvement options relate to production practices that cannot be verified in the final product
  - instruments based on best-practices regulation might be more effective.
    - certification schemes (e.g. organic food products)
    - horizontal measures such as the IED Directive or the European Action Plan for Organic Food and Farming.
  - methodologies for certification covering the entire supply chain would have to be developed.
  - experience gained through the ongoing Product Environmental Footprint project should be taken into account (if timing is appropriate).

# Conclusions - General

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- > Market surveillance on such requirements would probably require considerable resources to be effective (if at all possible) with a higher risk of non-compliance and uneven playing field in comparison to current Ecodesign Directive requirements based on product testing.
- > Allocation of efforts on market surveillance of the existing regulated products would probably be more valuable.

# Conclusions – Means of transport (1)

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- > For energy using products with already standardized methodologies for measuring GHG emissions, fuel consumption and other emissions to air, which are already part of the information requirements for passenger cars, the introduction of an energy label or environmental label would not present itself as a major burden. However, the option of doing so through the already implemented legal framework (Emissions and CO2 Regulations) presents itself as a better option.
- > A single label for all transport modes would be difficult to develop due to the large amount of variables to consider and its impact would have to be evaluated particularly in what regards consumer understanding.

## Conclusions – Means of transport (2)

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- > The stakeholder consultation and literature review have not produced evidence pointing to the need of setting individual ecodesign or energy labelling requirements on transport product groups such as trains, boats, airplanes.
- > To set minimum performance requirements for specific car models, further categories would have to be developed according to vehicle characteristics and use.

# Conclusions – Energy Labelling Directive

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- > There is still untapped potential for savings from labelling of ErPs within the current scope, such as the labelling of B2B products. (e.g. lifts / elevators)
- > Labelling schemes based on production best-practices and supply chain certification have, so far, been of voluntary nature due to the often significant burden they impose on manufacturers and market surveillance authorities.
- > Because much of the impact of non-ErPs are not related to energy consumption the possibility of labelling other impacts, aggregated into an index (e.g. carbon footprint, environmental footprint, water footprint, etc.) would have to be evaluated.
- > Advantages of including such an index into Energy Labeling Framework is doubtful as it could mean a loss of information and it is difficult to establish transparency and consumer trust.

# Conclusions – Ecodesign Directive

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- > There is still untapped potential for savings from setting ecodesign requirements to ErPs, as identified in the Ecodesign Working Plan (2012-2014), particularly relating to impacts in other phases than the use-phase (e.g. mobile phones).
- > Other instruments are often better suited to tackle the environmental impacts of non-ErP which target these impacts directly and have fully developed and proven methodologies (e.g REACH, Regulation 1107/2009 on plant protection products, regulation on pesticide residues).
- > Since many other impacts are covered by horizontal regulations (e.g. RoHs, REACH, Water Framework Policy), uncertainty remains to the advantages of developing individual requirements for each product.
- > Since some products are already covered elsewhere, it would seem reasonable to continue to deal with them coherently under that existing single framework.

# Conclusions – Ecodesign Directive

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- > The MEErP methodology focuses mainly on technological aspects of the product itself, which in the case of non-ErPs are often not the cause for environmental impact or the basis for improvement but, for example, more relevance should be given to the way they are produced.
- > It also does not address other aspects such as toxicity, land-use, impact on biodiversity, or depletion of biotic resources.
- > For non-ErPs, where the production phase is sometimes the highest contributor to the environmental impact of the product, the number of material options available in the EcoReport tool is limited and this may negatively impact the validity of the overall results. This may well be a direct consequence of non-ErPs not being covered by Ecodesign.

# Conclusions – Ecodesign Directive

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- > The regional origin of the raw material should also be taken into account in EcoReport as some products are included in a global supply chain.
- > Substantial resources would have to be allocated to the updating of the methodology for applicability to non-ErPs. The projects that have recently been finished have not yet been able to thoroughly solve the issues.



# Final Remarks

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- > On the basis of the preconditions set out (necessity, feasibility and added value) it seems premature to expand the scope of the Directives also in view of limited resources.
- > Nevertheless, since conditions are constantly changing, and experience is gained through existing smaller scale schemes, the use of a decision tree such as the one developed and applied within Task 3 the study should be considered for the evaluation of future inclusion of product groups.

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## Appropriateness of the current energy label

18/02/2014

Sophie Attalie and Paul Waide

# 1. Topics to be addressed

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- > Factors to be considered when setting energy efficiency thresholds
- > The ambition of energy efficiency thresholds
- > Prohibited classes on the energy label
- > Language neutrality
- > Product fiches
- > Use of ICT in relation to the label
- > Use of the label in distance selling and technical documentation
- > Whether or not to include monetised energy savings information
- > Whether or not to include information on the whole life cycle impact
- > Whether or not to include additional environmental information
- > Dual scales/Scales within a scale
- > Alternative label design options

## 2. Factors to be considered when setting energy efficiency thresholds

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- > Currently no systematic approach used on how to set the gap in EEI between label class thresholds
- > Inconsistency on whether most efficient classes set at the moment the label is conceived are reserved for levels not expected to be attained till the longer term or are already met –guidelines could be beneficial
- > Ambition of EEI thresholds could take learning curves into account
- > EEI may favour larger capacity, higher energy consuming products: solutions - address this via:
  - give more weight to absolute energy consumption in the derivation of EEI
  - avoid biases and adopt non-linear formulae when a sound physical basis
  - eliminate EEI bonuses for non-fundamental product features
- > Products that clearly promote and inform low energy consuming user behaviour should be eligible for ranking bonuses on the energy label scale

### 3. Prohibited label classes and scale recommendations

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- > If Ecodesign requirements prohibit the sale of products in some label efficiency classes it is recommended that the label design be altered to make it apparent to label users that these efficiency classes can no longer enter the market
- > Options for doing this include:
  - Greying-out or striking through label classes that are no longer permitted
  - Making prohibited label classes transparent with a soft border
- > It is also recommended that:
  - label scales cover the actual and potential spread in energy performance
  - the upper label classes should be set at a level that encourages the development of more efficient products than are currently on the market
  - ideally labels would have seven active classes, but a reduced number should be permitted if there is an insufficient spread in energy performance
  - label scales should be set with particular attention to the boundary set between the green and the yellow classes, which is key in motivating consumers to purchase more energy efficient products

## 4. Language neutrality

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- > A move towards a single common language neutral label design - the same across all Europe - was taken at the 2010 recast of the ELD
- > Language neutrality adopted primarily to solve implementation difficulties that occurred because the original label came in two parts
- > The viability of the solution adopted was not tested with consumers and appears to have some negative consequences regarding comprehension and salience
- > Were national languages to be re-introduced on the label – provided a suitable practical solution on how to do this could be found – it would be possible to add explanations of the meaning of units, icons, climatic zones and energy performance measures that would therefore raise the comprehension and salience of the labels, but possibly also raise complexity and lack of understanding.

## 5. Product fiches

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- > Theoretically, fiches are useful to consumers at the time of purchase and to regulators and market surveillance authorities
- > Some manufacturers propose that the printed fiches be replaced with electronic fiches; possibly supported by a QR code on the label leading to an on-line version
- > Consumer groups argue product fiches should be kept in shops (and if on-line, only as a complement to the paper versions) and also shown in distance selling
- > No literature is available that has evaluated whether fiches are indeed complete and correctly supplied/displayed, nor how they are used by or understood by consumers
- > It is recommended field research be done to assess this before any decisions are taken

## 6. Use of ICT in relation to the label

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- > ICT could convey energy, environmental, annual/life cycle costs, calculators, provide info in national languages etc.
- > via internet, smartphone tools and a "media mix" at the point of sale
- > Not all consumers have access to ICT or are in a position to use it, so better to limit the use of ICT to the provision of complementary info
- > ICT could also support consumers in conducting their own research via product listings, advice on how best to operate/use products etc.
- > Label or manual ICT links to on-line fiches could replace printed fiches but some stakeholders oppose this
- > Electronic labels could be displayed in shops, or retailers could be able to download the newest labels from the internet in all languages
- > Electronic price tags could convey operating costs and payback periods
- > Smart appliances could rate user behaviour at home by displaying dynamically generated energy labels on their electronic display
- > Field trials are needed to understand the type of information it would be effective to convey and what proportion of the public would actually be ready to use ICT tools



## 7. Use of the label in distance selling – closing a gap

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- > A fundamental principle of a mandatory informative labelling scheme is each product should have a label, shown to consumers at the time of purchase to inform their purchase decision
- > However, the visual aspects of the label have not generally been used in distance selling, which is the fastest growing proportion of the market
- > It is also the segment where the greatest level of non-compliance with the existing labelling requirements has occurred
- > A proposal on a potential Delegated Regulation to amend all relevant regulations so that the label, or at least a colour arrow with the energy class, should be mandatorily displayed on internet sales material - was discussed in the EU labelling expert group and notified to the WTO in June 2013, but has not yet been adopted by the Commission
- > If approved, consumers shopping through distance selling supply chains will benefit from the same label mnemonics elements as consumers buying in shops

## 8. Whether or not to include information on monetised energy savings on the label

- > Consumers express different views on whether or not monetised energy savings should be displayed on the energy label
- > Stakeholders in the current consultation also express different views on this issue; however, even among favourable stakeholders, a distinction is made between the theory – i.e. that it would be good in principle to convey this information – and the practice, that it needs to be feasible to implement, properly understood and meaningful to consumers
- > It is therefore recommended that no decision be made to include operating cost information unless its feasibility has been demonstrated and research has shown that it would be both welcomed and motivating to consumers and be correctly interpreted by the broad majority
- > Research could also look at the options to display this information on price tags, whether printed onto paper or via ICT techniques

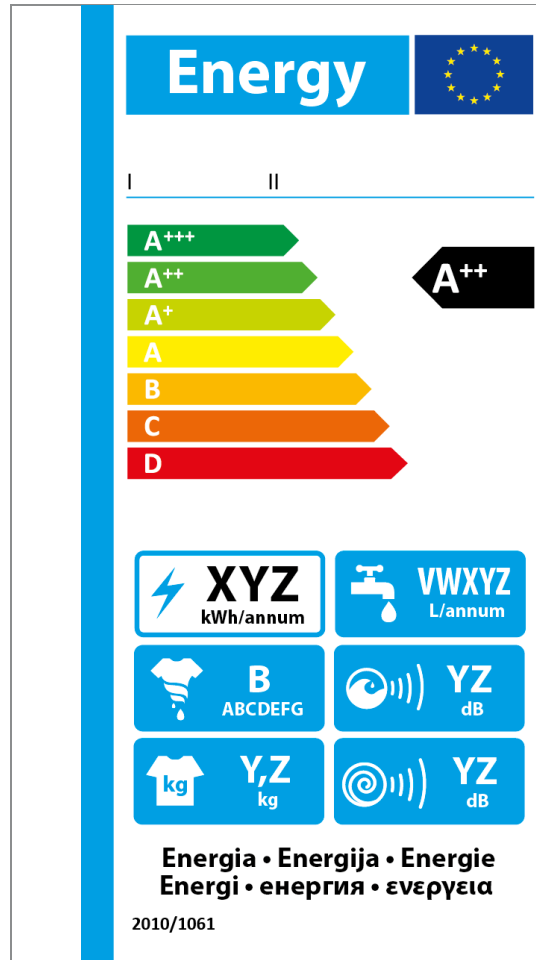
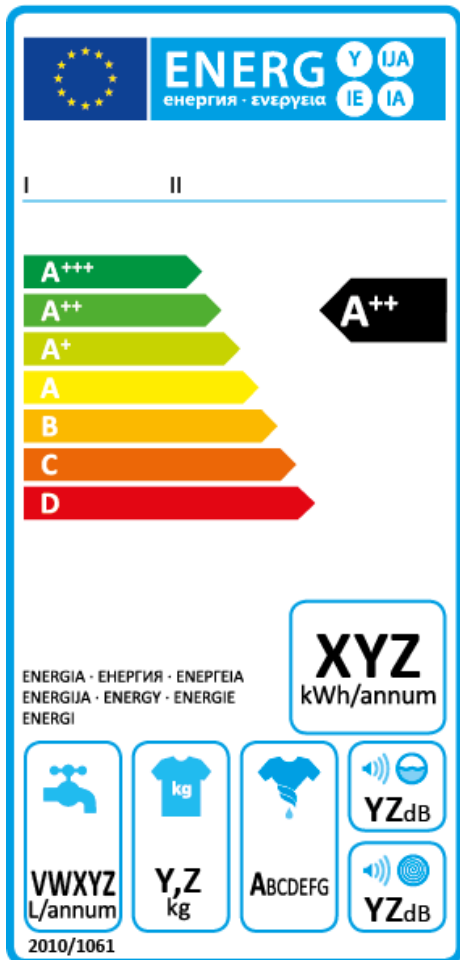


## 9. Whether or not to include information on the whole life cycle impact or extra environmental information

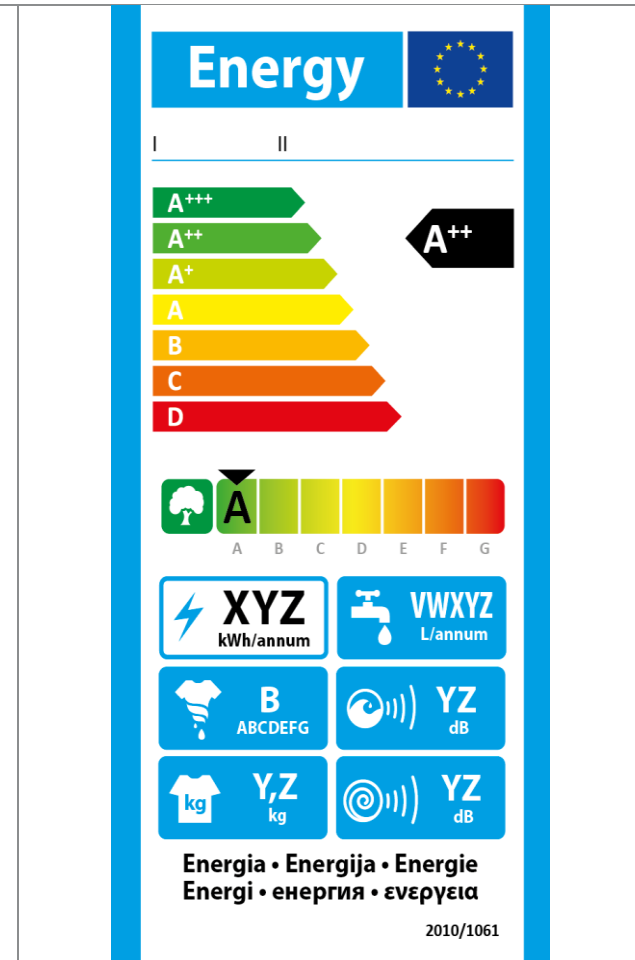
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- > Most stakeholders/literature argues the focus of the label should remain on the consumption of resources in use –at least in the near term
- > A sizeable minority of consumers are motivated by environmental impacts, but a larger proportion are motivated by energy bills so a principal energy performance classification based on embodied energy could dilute appeal;
- > however, a label incorporating other environmental performance information could have a positive impact on consumer purchasing behaviour
- > First need to define environmental parameters and establish how to evaluate , quantify and calculate them; then work out how best to communicate them to consumers
- > This information could be presented as an aggregate secondary indicator (see next slide) or via product fiches or QR codes
- > Given current knowledge limitations it seems too early to take a firm decision in favour of including additional environmental information on the energy label – more research is needed

# 10. Label re-design options – rationalisation, signification of change, language neutrality, dual scales

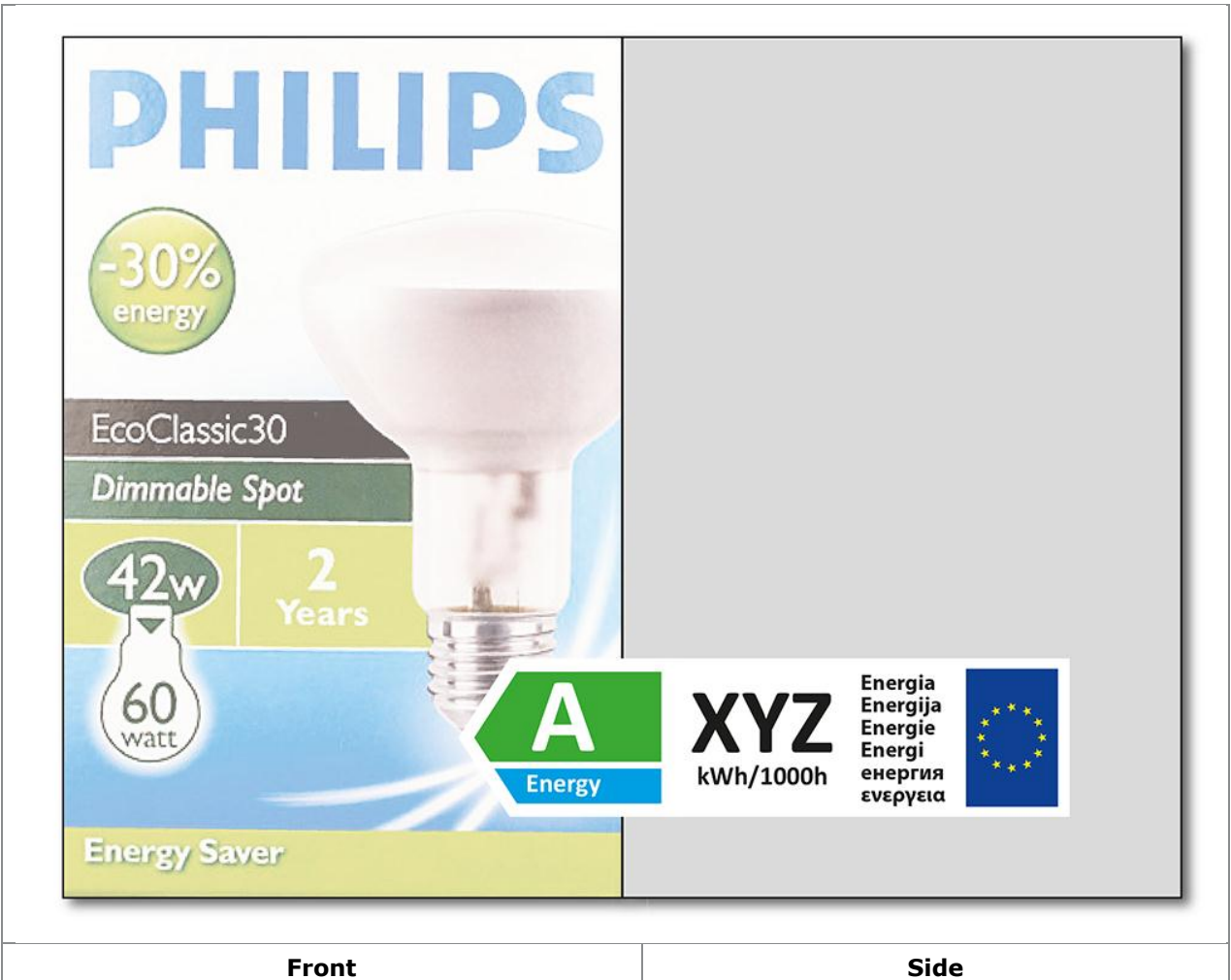


a) Label redesign (standard)

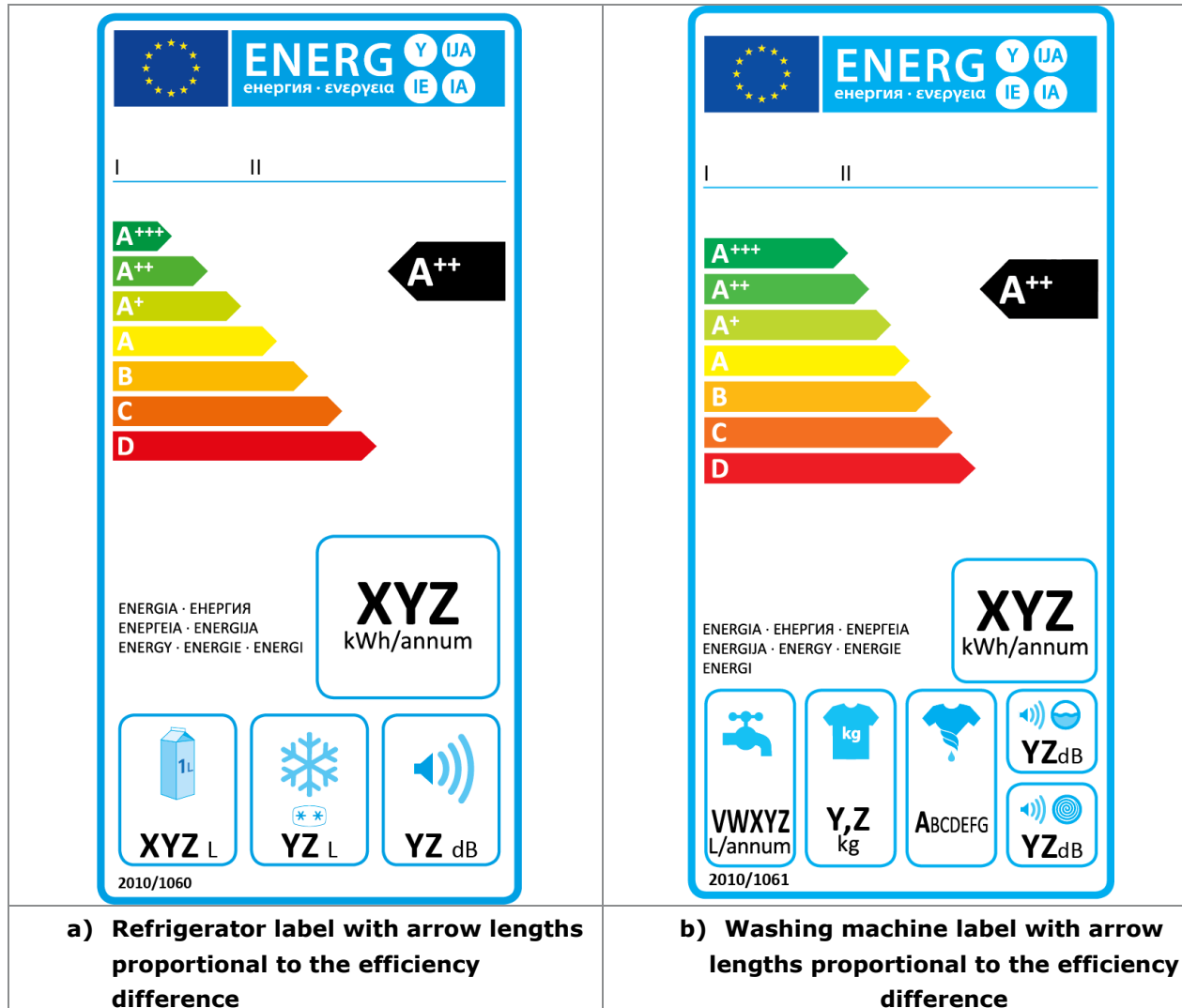


b) Label redesign with environmental performance indicator

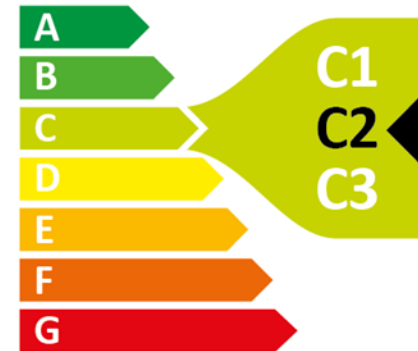
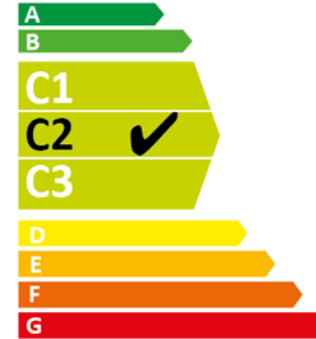
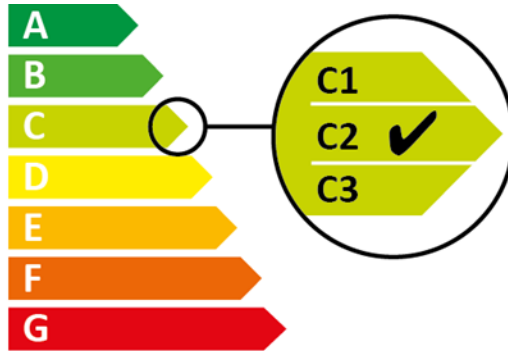
# 11. Label re-design options – simplified “sticker” for products with small packaging – to ensure the label class is visible



# 12. Label re-design options – arrow lengths that are proportional to the step change in efficiency



# 14. Label re-design options – scales within a scale to enable differentiation and comparison across technology/fuel choices





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## Improvements in rulemaking procedures for Energy Labelling and Ecodesign

18/02/2014

Edith Molenbroek

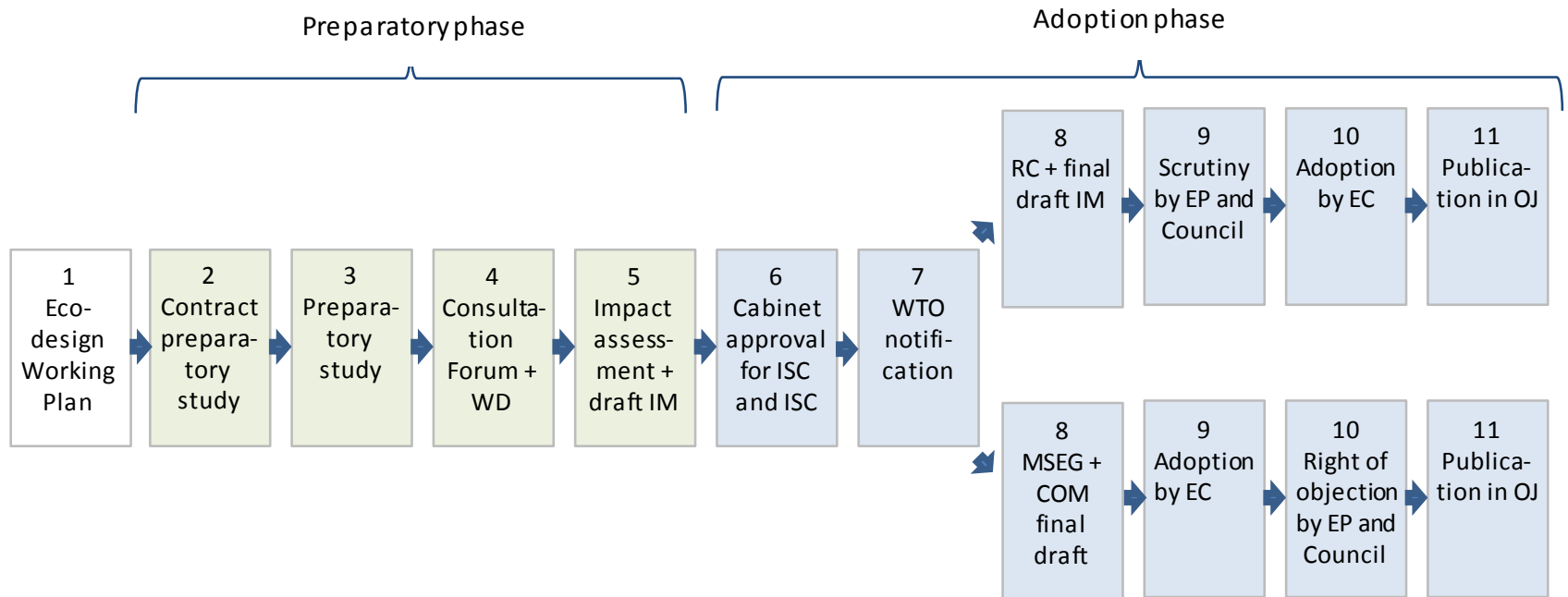


# Topics to discuss

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1. Various phases of the regulation process
2. Progress and planning in the regulatory process
3. Resources: quantity and quality
4. Data availability and quality
5. Ambition level of requirements
6. Standardisation
7. Voluntary Agreements

# Current procedure



# 1. Phases regulation process

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Satisfaction phases regulation process:

Stakeholders least satisfied with preparatory study.

Stakeholder consultation pointed out that

- > stakeholders (mostly gov. + env., but also support from other stakeholder groups) are in favour of a procedure with more Member State involvement than the current delegated acts procedure,
- > transparency is desirable (although no clear recommendations for improvement given)
- > stakeholders see a need for better alignment of the ED and ELD process.

## 2. Progress and planning in the regulatory process

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Improvements made, but **risk of delay** still present

Delays in process connected with

- > The quality of the preparatory study and *presence of sufficient quality data*
- > Too few staff available for the workload at hand at the Commission.
- > Technical complexity of the product.
- > Contentiousness of the product.
  - *Recommendation: planning of the regulation process during the final stages of the preparatory study*
  - *Asses technical complexity, contentiousness of the product*
  - *Secure capacity within the Commission*
  - *Incl. periods for stakeholder comments*

### 3. Resources: quantity and quality

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#### Quantity: constraints in resources (much less than other countries)

- > Dissatisfaction stakeholders with preparatory study
- > EU other policies: recommended to make a more structured approach to examining interaction with other legislation
- > Recommendation for extra work in case data is lacking
  - *Recommendation: more effort, and therefore more resources in a preparatory study*

#### Quality: People moving on to other positions

- *Recommendation: Guidelines for the preparation of ED and ELD measures, (clarity to all stakeholders, enables systematic stakeholder feedback collection, include lessons learned)*

More support from other institutions to the policy process (e.g. EACI<sup>1</sup> projects):  
is it enough?

## 4. Data availability and quality

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- > Preparatory study should make a very firm foundation for the regulatory process to come
- > Difficulty in preparatory study is often related to availability and quality of data retrieved in the process
  - *Recommendation: build in an evaluation step after tasks 1 – 4 of a preparatory study to assess whether the data gathered is of sufficient quality to continue the study.*
  - *Recommendation: build in the possibility to add an extra phase of data gathering to the process, using screening analysis and engineering analysis.*

## 4. Data availability and quality

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### *Data in revision process*

Build upon

- > Ecodesign mandatory information requirements (and Energy Labelling product fiche and possible future QR code information)
- > Present efforts for Energy-Related Products Database (6 product groups)
  - *Recommendation: to establish a mandatory registration database with Ecodesign and Energy Labelling product specification based on information requirements from existing legislation for all regulated products.*

## 5. Ambition level of requirements

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### Regulations with low ambition

- > represent lost savings
- > require a lot of administrative effort from all stakeholders with low result
- > prevent a Member State from setting their own standards with higher ambition

### Need for a process that is consistent in delivering regulations with appropriate ambition levels

Expand toolbox:

1. to account for learning effects
2. requirements beyond LLCC (Lowest Life Cycle Cost)?
3. increased role for benchmarks
4. absolute energy consumption levels apart from energy efficiency



## 5. Ambition level of requirements

Methodology	Recommendation
To account for learning effects	Yes ( $\pm 6$ years)
Requirements beyond LLCC?	<i>No, keep economic benefits for consumers and economy. Where LLCC not clear: equal LC / affordability / ban significant share</i>
Increased role for benchmarks?	<i>ED: Yes. Define Tier 3 at BAT / BAT start of the revision process. Need market monitoring ELD: Yes. Top class based on BNAT.</i>
Consumption vs. efficiency?	<i>Yes, mix of efficiency and consumption. Guiding principles to be developed.</i>

## 6. Standardisation

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Improvement options on standardisation suggested earlier (e.g. CSES study) and several have received follow-up from the EC. Too early to evaluate this follow-up.

Two comments from study team on improvement options:

1. Earlier start of the process of standards development and a better integration with preparatory studies.
  - *Recommendation: perform a pre-screening of existence of standards for newly to be regulated products as early as possible (by the time the Working Plan is published).*
2. Greater involvement of market surveillance authorities, to keep up to date with developments in scientific and technical knowledge.
  - *Recommendation: attribute MSA's a significant role in the process of development of technical standards.*

# 7. Voluntary Agreements

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- > VAs tend to be proposed with complex products with fast technological development
- > In practice, VA processes are not necessarily fast (e.g. they also require an impact assessment, inter-service consultation and a formal decision from the Commission) which also puts the cost efficiency into question.

The flexibility of a VA is a benefit and a challenge at the same time

- *Recommendation: VA's can be maintained as a policy option, but transparency in monitoring is a key factor. Finalise Guidelines for Voluntary Agreements and update it when necessary, based on ongoing experience made with the VAs to date.*

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## Experience with market surveillance

18/02/2014

Juraj Krivošík

## Level of activities

- > 5 EU Member states are active in market surveillance
  - > 6 countries are not active
  - > The rest has medium to low activity
- 
- > Most active states test 20 – 30 models per product category per year (if a product category is selected to be tested)
  - > There are about 30 000 models on EU market at any moment (per white goods categories)
  - > Therefore, **0,6% of the market is surveyed...**

# Level of non-compliance: 10-25% products, 10% energy?

Non-compliance	Note	Source
25 – 50%	Global estimate of non-compliant products	Ellis, 2012
10 – 20%	Ecodesign related non-compliant products	CSES, 2012
10%	Value of energy lost, global	Waide, et.al., 2011
15%	Label and ecodesign non-compliant products	Defra, 2009
25%	Non-compliant products concerning missing label declarations at sales points	Defra, 2009
21% 54%	Refrigerators, products non-compliant, - energy class declaration - some requirement	ATLETE, 2011
33 – 38% 11-14%	Products offered for sale without label display Products with partial or incorrect label display	Come On Labels, 2013 b
0 – 60%	Denmark, non-compliant products based on tests of various product groups.	DEA, 2012; Atlete, 2011; Atlete II, 2013b
20 – 73%	UK, non-compliant products based on tests of various product groups	IEA, 2010; Atlete, 2011; Culling, 2010; Waide et.al., 201; CLASP, 2010
0 – 27%	Netherlands, non-compliant products based on tests of various product groups	Presutto, 2013b
25%	Spain, non-compliant products based on RENOVE plan subsidy scheme	Waide, et.al., 2011

# Benefits of compliance verification unclear

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- > If 10% of projected Ecodesign/Labelling policy savings in the EU are lost through poor compliance:
  - 100 TWh/year of lost energy savings
  - €14 billion/year or €28 per capita
- > Current total government expenditure on compliance
- > Activities in the EU: €7 million = 0.05% of the value of lost energy savings

Source: Waide, P., Eide A., Scholand M.: Enforcement of Energy Efficiency Regulations for Energy Consuming Equipment , EEDAL 2011, Copenhagen

# Some problems

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## > Resources

- because unclear benefits

## > Staff

- expertise in growing range of products

## > Laboratories

- barriers in using external laboratories

## > Sharing, contributing and accepting

- plans & results

## > Penalties

- size vs. publishing

## > (Complicated/unclear) definitions & procedures

- contacting suppliers, product names, internet, 3rd countries, technical documentation, cost sharing, databases, lack of labs, tolerances, testing procedures, parameters, steps, rounding, ...



# Challenges – illustration 1: Tests – model names

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- > Model names and product identification
  - Family of products in one country
  - Model names in various countries
  
- > Manufacturer: one test / calculation
- > Authority: has to check every model individually

# Challenges – illustration 2: Shop visits

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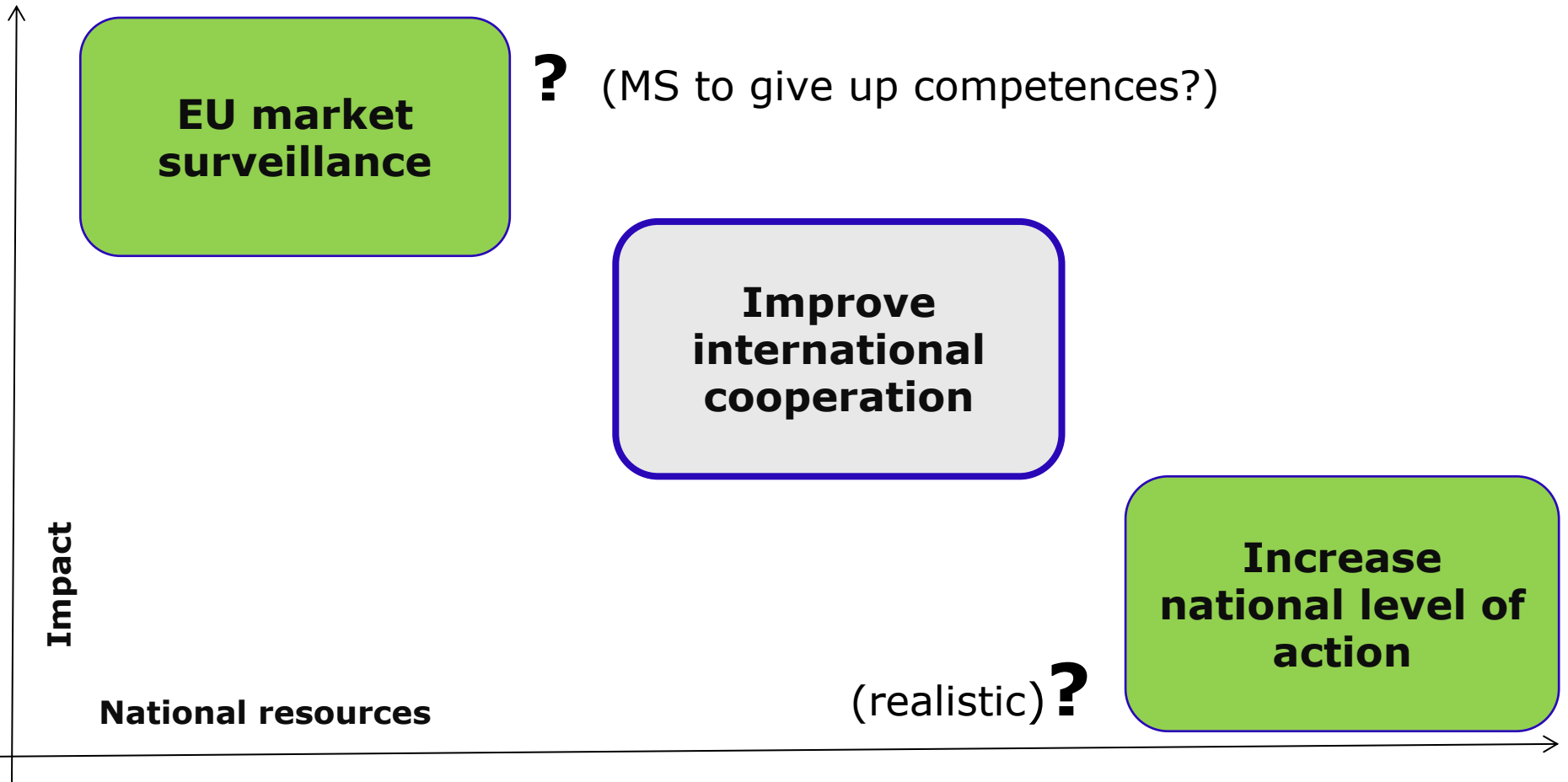
## > Shop visits:

- N. of visits/year varying from 0 to over 300.
- Ca. 20% of products non labelled and 15% wrongly labelled

## > Possible fines, but varying in size and principle of the definition of its size,

## > No publishing of the results of shop visit inspections & little training of retail staff to ensure improvement

# Ways out



# First findings and recommendations

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## **Resources**

- > Calculate social benefits of market surveillance
- > Concerted / joint projects
- > Minimum level of activities / annual plans / reporting activities / publish overviews and closed cases

## **National market surveillance**

- > Streamline compliance procedures – negotiation after Step 1
- > Laboratories: usage of foreign labs / templated reports
- > Penalties: dissuasive (energy lost), publishing
- > Third party certification: option open per product group, to avoid risks

## **MS cooperation and EU support**

- > Share plans - Share results - Adapt results
- > Cooperation to be able to adapt results on all relevant markets
- > Communication with operators from third (other EU, non EU) countries
- > Product database – monitor all cases, not only market withdrawals

## **New legislation**

- > Clear legislation (Clear text / EC Communication / MSA guidelines)
- > Enforceable requirements

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