The EU's regulatory approach to lighting – past, present and future

Ruben Kubiak, European Commission – DG Energy

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Ruben Kubiak joined the European Commission as Policy Officer in the Energy Efficiency Unit, Directorate-General for Energy, in 2012. His responsibilities include the ecodesign and energy labelling of lighting products and pumps, but also the economic modelling of energy efficiency policies.

Before joining the European civil service, Ruben Kubiak studied physics and psychology at the University of Würzburg and the University of Texas at Austin. He earned a DPhil in Biomathematics from the University of Oxford on the evolution and spread of zoonotic infectious diseases.

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European Commission

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Past, Present and Future

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Energy

Past

Energy Consumption of Lighting

Lighting represents a significant share of Europe's energy consumption and offers a large savings potential

from MEErP report by VHK (2011)

How to Realise Efficiency Potential?

Ecodesign
Horizon 2020

Energy Labelling
Horizon 2020
Energy Star
Ecolabel
GPP

Ecodesign and Energy Labelling legislation has ensured the market for efficient, high quality lighting products and will save 102 TWh by 2020

Ecodesign Regulations on Lighting

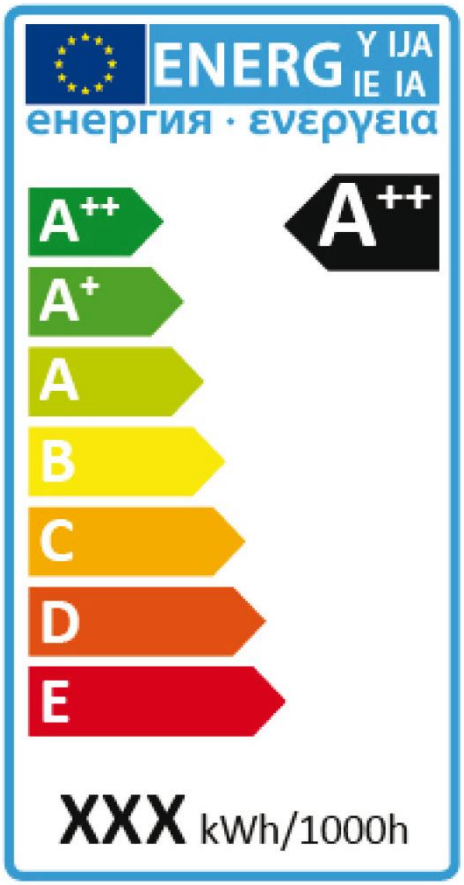
- **Regulation (EC) No 244/2009**
  - for non-directional household lamps
  - phased-out incandescent lamps
  - phase-out of some halogen lamps in 2016 ("Stage 6")
  - contains efficacy, functionality and information requirements

- **Regulation (EC) No 245/2009**
  - for technologies usually used in street lighting and office lighting (tertiary lighting)

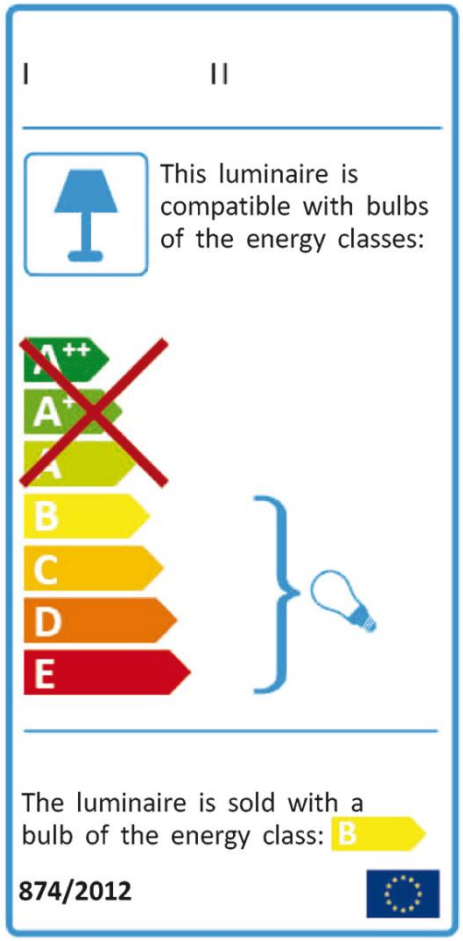
- **Regulation (EU) No 1194/2012**
  - for directional lamps, LEDs and related equipment
  - possible phase-out of some halogen lamps in 2016
  - contains efficacy, functionality and information requirements (latter two more detailed than in 244/2009)

Energy Labelling Regulation 874/2012

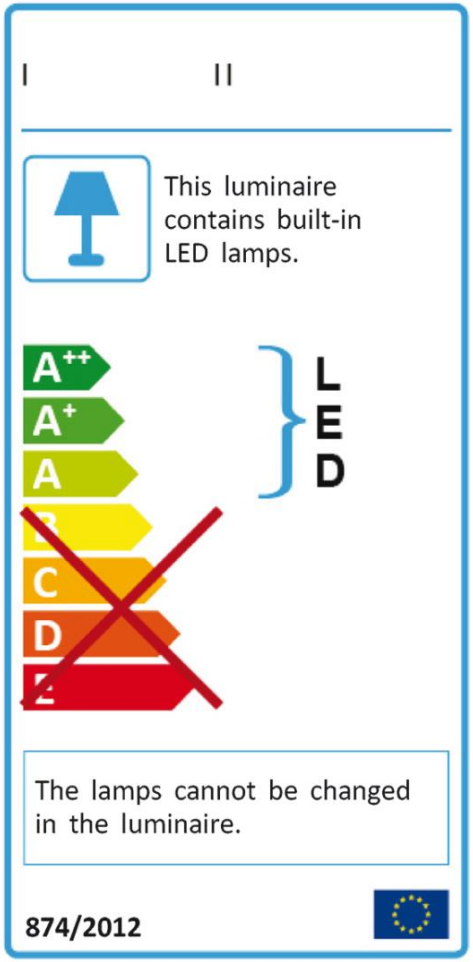
Lamps (colour)



Luminaire with replaceable lamps



Luminaire with LED module



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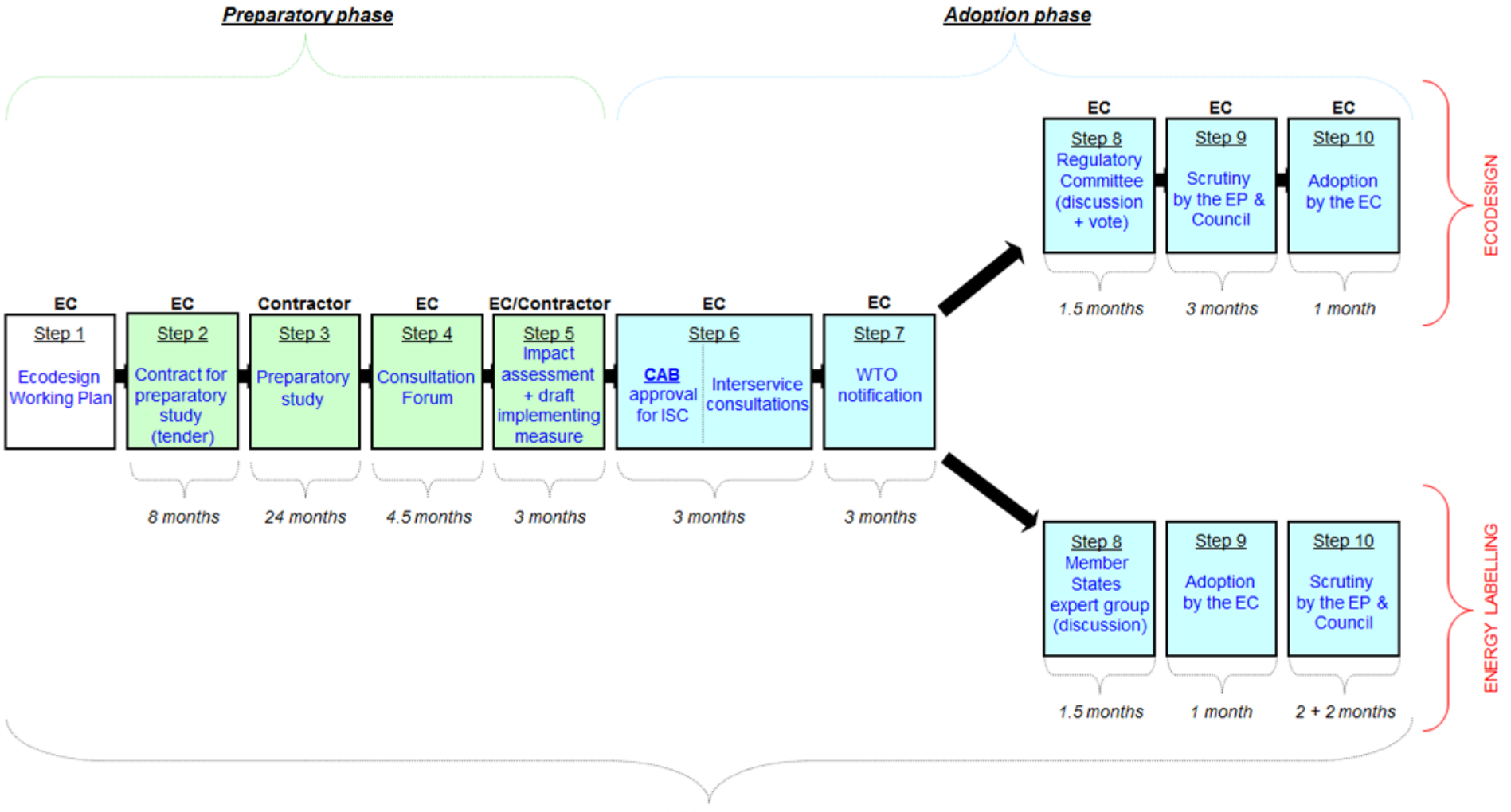
Process Time Line



Present

Ecodesign – Recent Developments

- **Regulation (EU) No 2015/1428**
  - amending all three lighting regulations
  - postponing "Stage 6" to 2018
  - updating and tightening the definition of special purpose products
  - fixing minor problems
  - but only comes into force on 27 February 2016

- **Market Assessment according to 1194/2012**
  - legally required to phase out some directional halogen lamps in 2016
  - draft document indicated that phase out could go ahead, final document still work in progress

- **Preparatory studies on lighting products and lighting systems**

Future

Energy Union

1 Security of supply

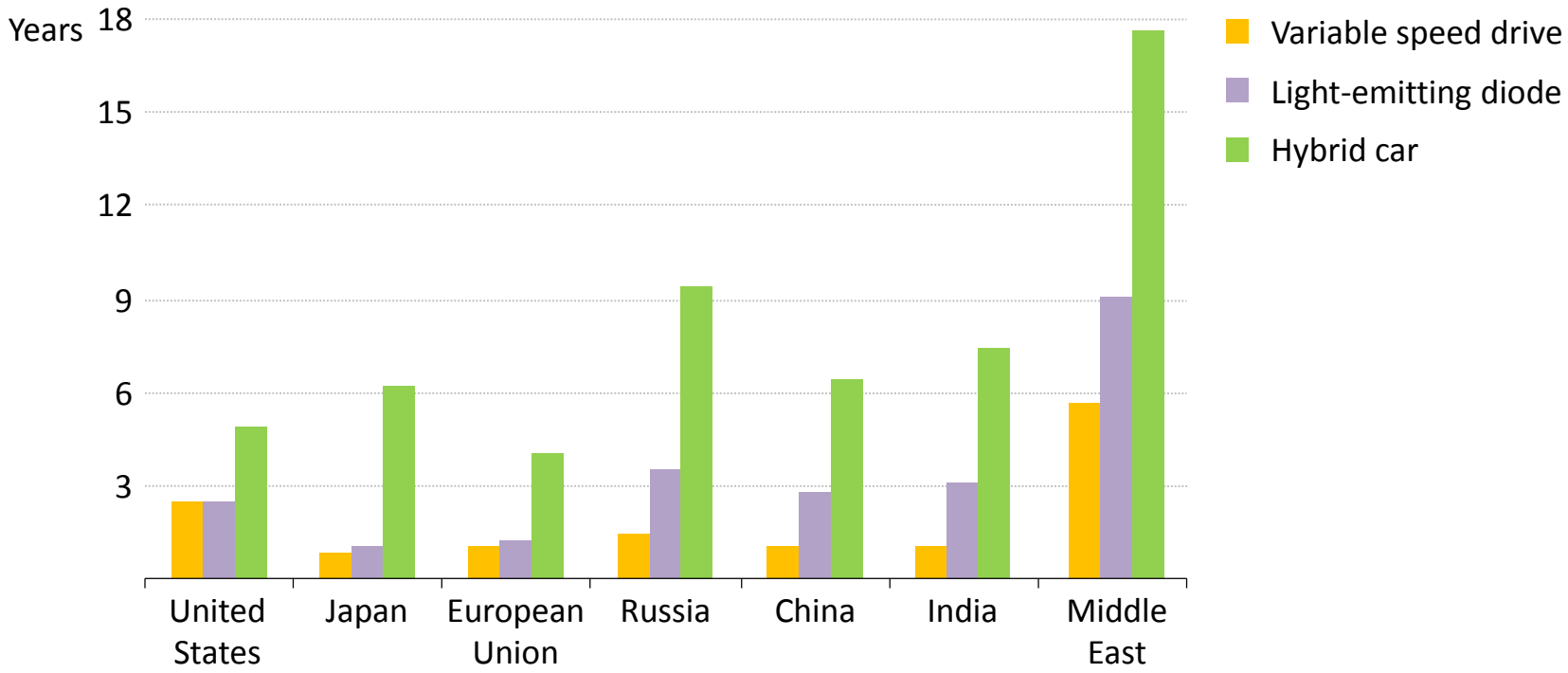
2 Internal energy market

3 Energy efficiency

4 Emission reduction

5 Research & development

Future of Lighting: LED, LED, LED… (and hopefully OLED)

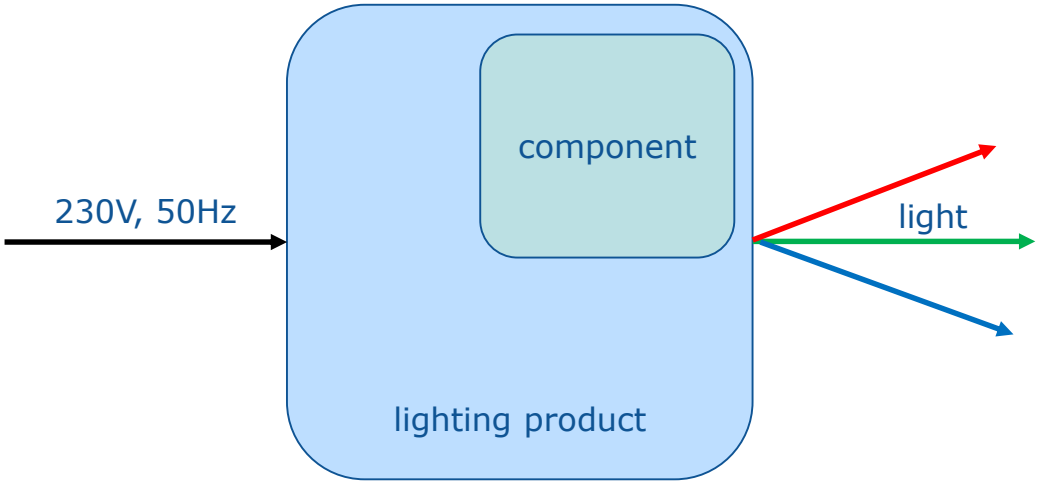


Payback periods for selected technologies and regions in 2013 (Source: IEA)

First Step: Single Lighting Regulation

Single lighting regulation to replace the three old ones. Aims:

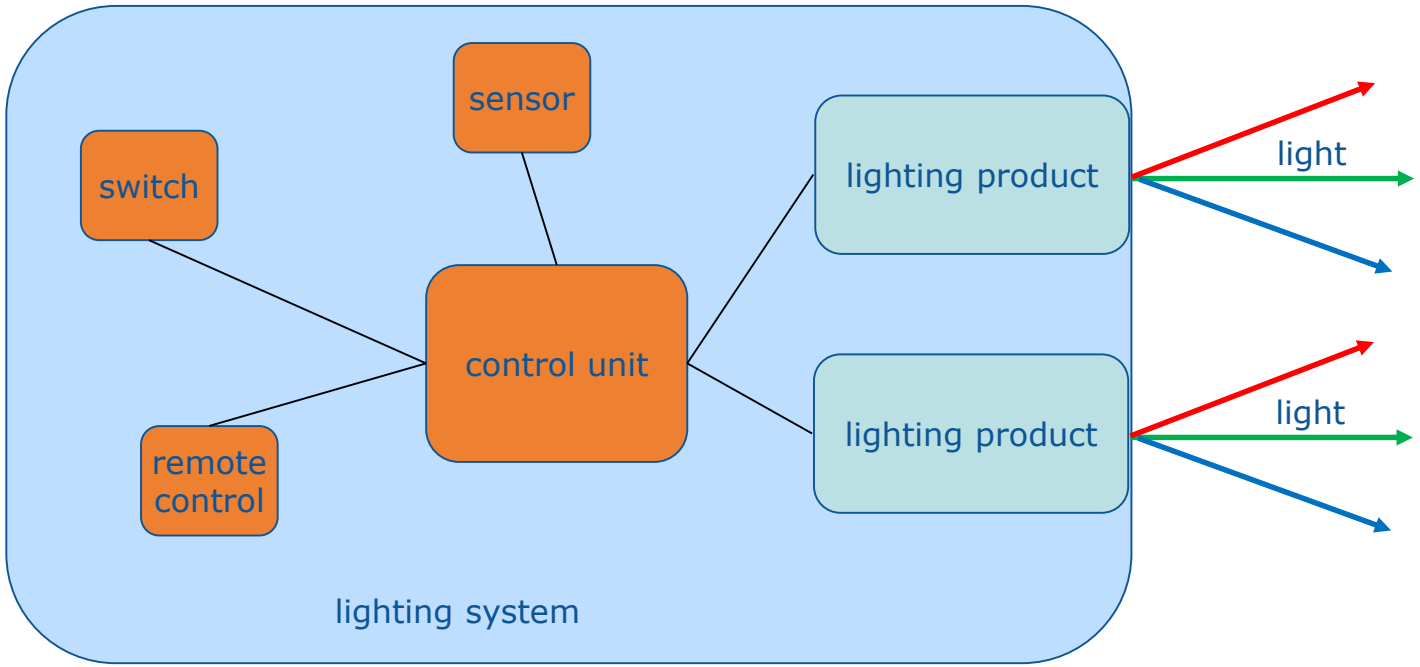
- Removal of technical (obsolete) definitions like "lamp", "luminaire"
- Focus on lighting product and lighting product component:



- Core idea: reduction on important aspects, faster surveillance testing, improved understanding

Second Step: Lighting System

- Efficiency on system level
- Requirements at planning stage to optimise efficiency, e.g. for a whole building:



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Thank you!