



# MOTOR SUMMIT 2014

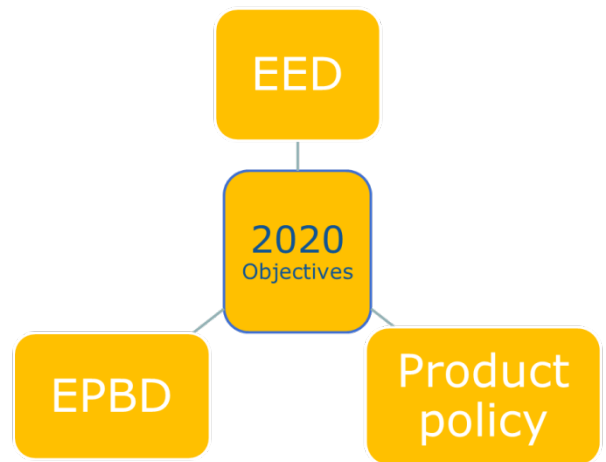
## European experience in motors and motor system MEPS

8 October 2014

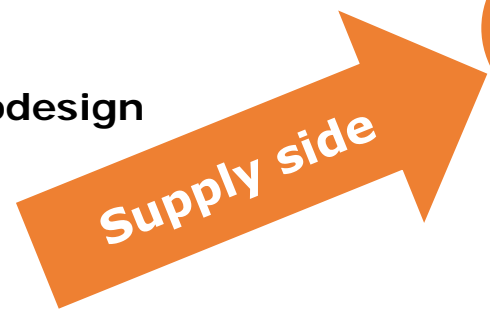
DG ENER - UNIT C3  
Energy Efficiency

Marcos González Álvarez

# General background



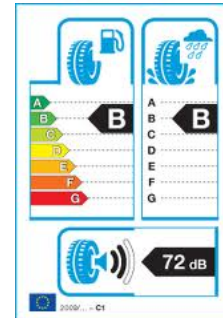
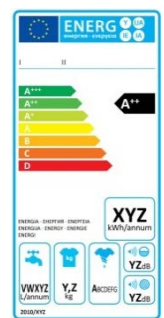
**Energy Labelling**  
Tyre labelling, Energy Star,  
Ecolabel, GPP



**Efficient products**

Both directives are «frameworks» defining the «rules» for setting product-specific requirements and legislation.

It is the **combined** effect of both measures which ensures a dynamic improvement of the market.





# Electric motors Regulation 640/2011



16/06/2012

01/01/2015

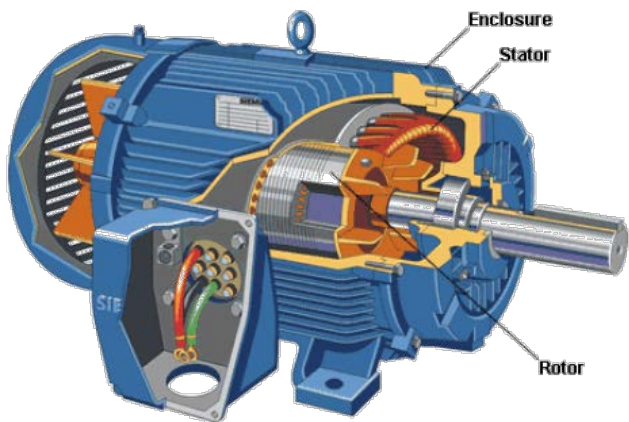
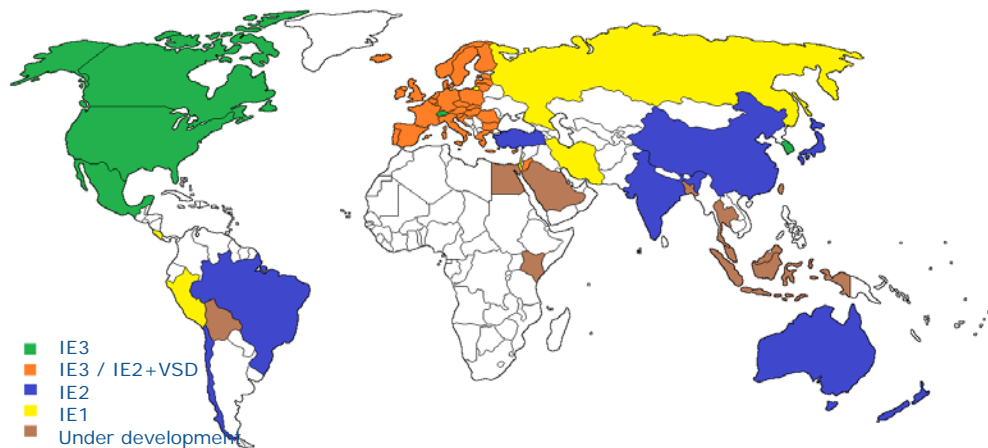
01/01/2017



**IE2**

**IE3**  
**IE2+VSD**  
**> 7.5 kW**

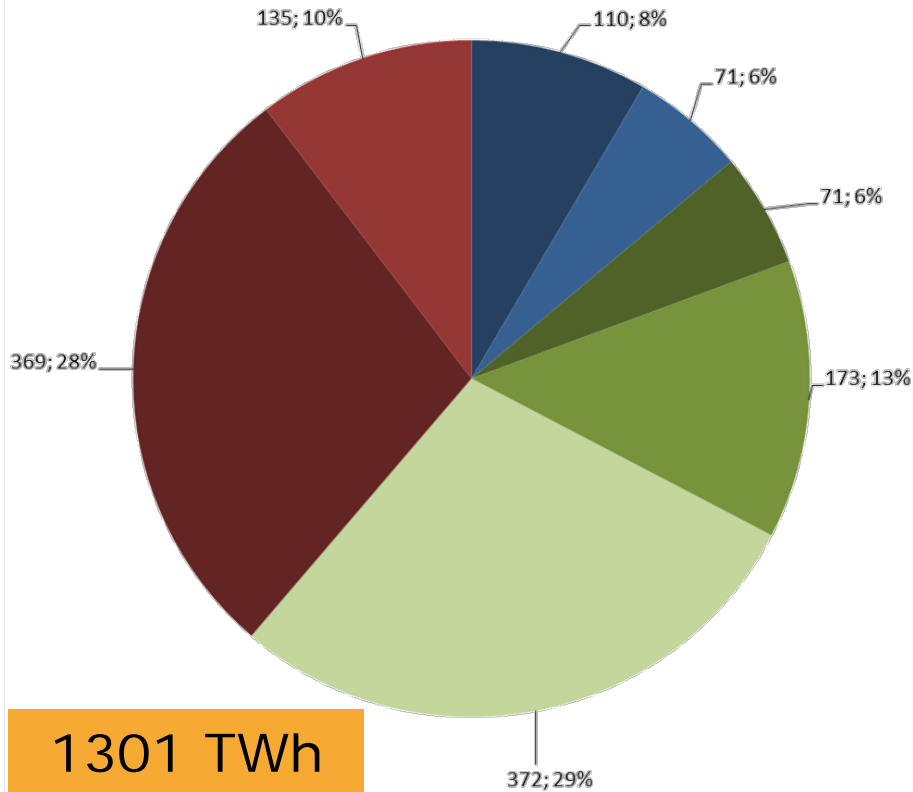
**IE3**  
**IE2+VSD**  
**> 0.75 kW**



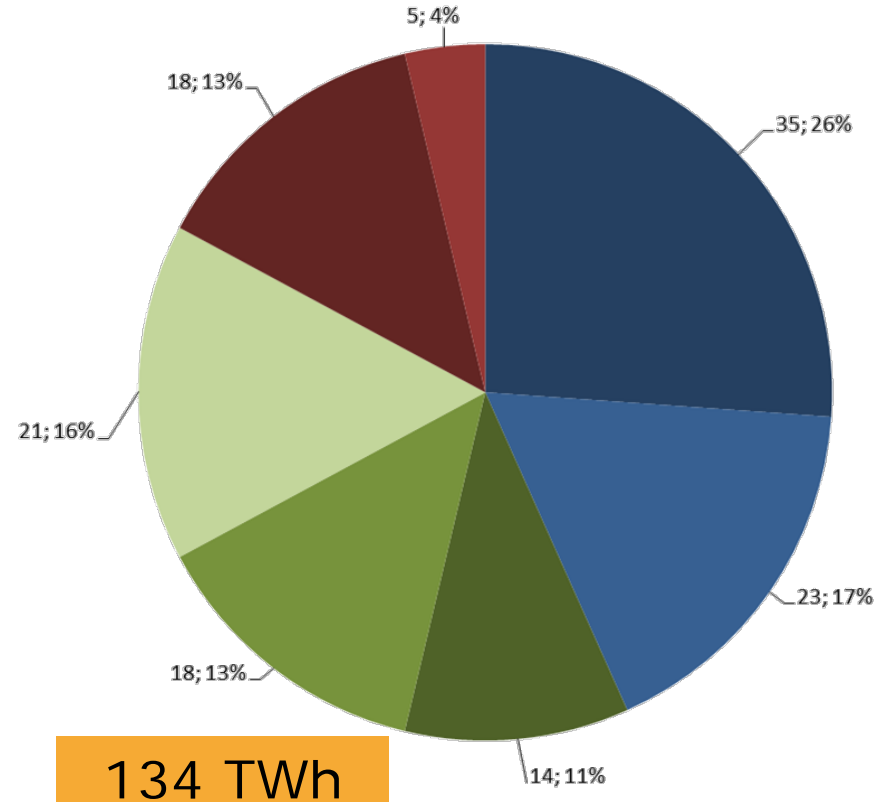
**Estimated savings: 135 TWh (2020)**



### Energy Use [TWhpa]



### Energy Losses [TWhpa]



- Small induction motor - 1 phase
- Small induction motor - 3 phase
- Medium induction motor (S)
- Medium induction motor (M)
- Medium induction motor (L)
- Large induction motor - LV
- Large induction motor - MV

## EU sales of electric motors within scope of proposed regulation

Power range		Thousands of units sold
≤ 750 W	Single-phase	67 000
	Poly-phase	7 300
> 0.75 kW but ≤ 375 kW	Single-phase	6 379
	Poly-phase	8 100
> 375 kW but ≤ 1000 kW	Voltage	10
	Medium Voltage	3
<b>Total</b>		<b>88 792</b>

## EU sales of VSD within scope of proposed regulation

Power range	Thousands of units sold
≤ 750 W	1 130
> 0.75 kW but ≤ 375 kW	2 890
> 375 kW but ≤ 1000 kW	7
<b>Total</b>	<b>4 027</b>

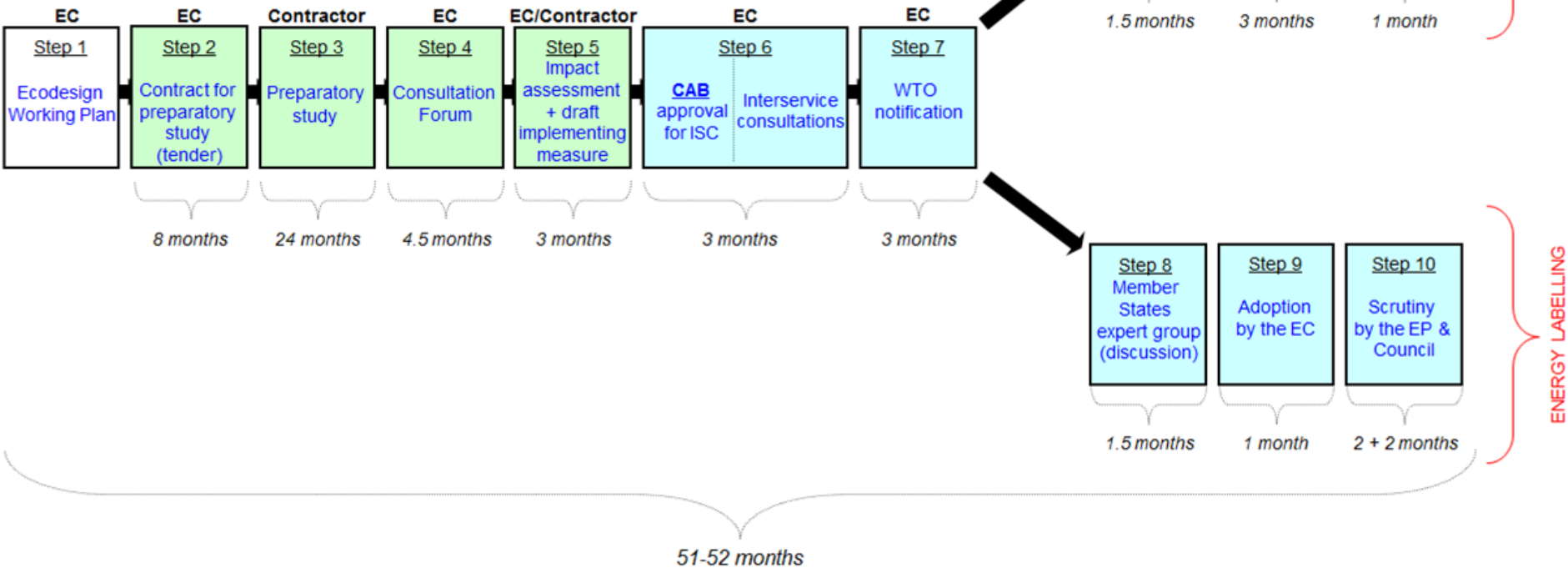
# ED and EL process

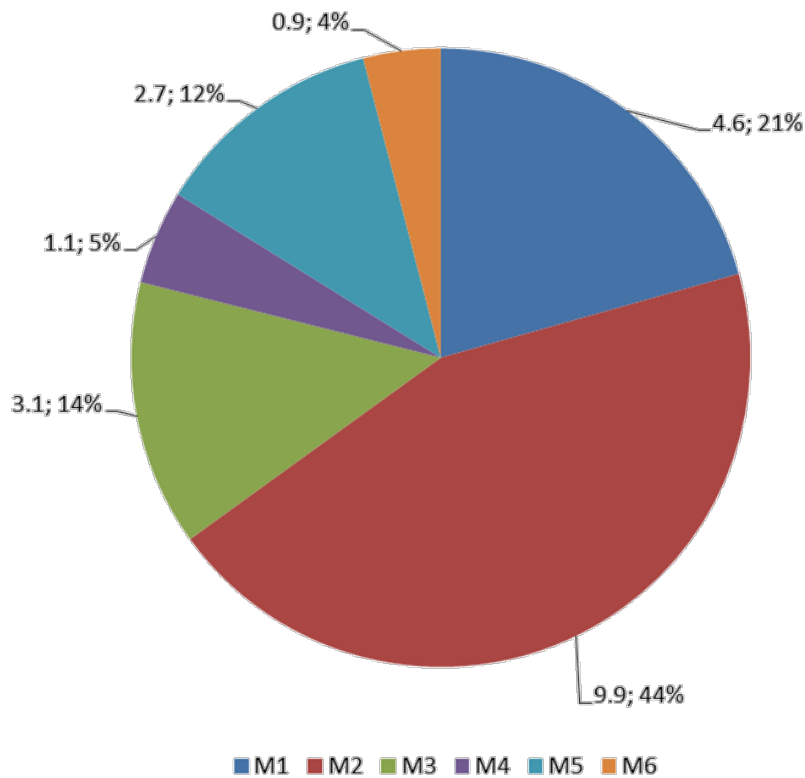


## Preparatory phase

## Adoption phase

29/09/2014



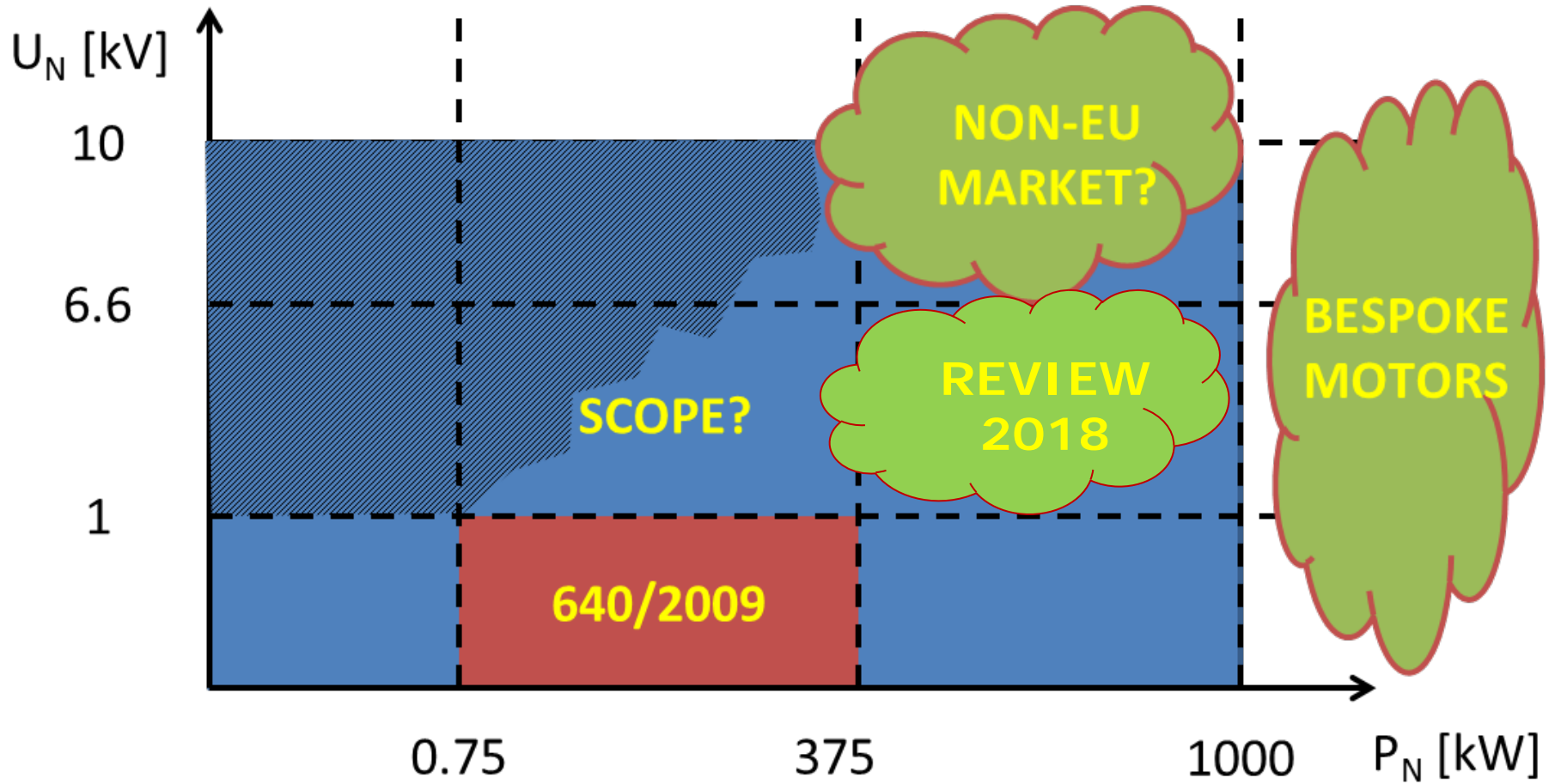


22.3 TWh

Possible measures	Energy Savings [TWh/a 2030]	Application
M1. Small single phase motors (120 W – 750 W) - IE2	4.6	01/01/2018
M2. Small three phase motors (120 W – 750 W) - IE2	9.9	01/01/2018
M3. Large low voltage motors (375 kW – 1 000kW) - IE3	3.1	01/01/2018
M4. Large medium voltage motors (375 kW – 1 000kW) - IE3	1.1	01/01/2020 Standard to be developed
M5. Removal of option to use an IE2 motor where a VSD is used	2.7	01/01/2020 Subject to review
M6. Explosion proof and brake motors in the scope of the Regulation	0.9	01/01/2018
M7. Medium motors (750 W – 375 kW) - IE4	6.7	To be re-evaluated in the future
M8. VSDs - IE1	< 1	01/01/2018
M9. Mandatory information requirements	Not Applicable	01/01/2018

The savings attributed to measures on small motors have been minorated for taking into account that they might be integrated into already regulated ErP.





- Acknowledgement of the importance of the product group.
- Member States want us to evaluate if MV motors can be covered before 2018.
- Evaluate if more stringent requirements can be set to VSDs.
- Evaluate if the option "IE2+VSD" can be removed before 2020 and what would be the impact.
- Information requirements to be re-evaluated.

CF documents available in Commission database  
(CIRCA BC)

Comments on proposals until 31/10/2014



- The Commission services to develop an "Impact Assessment" with evaluating different policy options and its consequences.
- Inter Service Consultation with other services.
- WTO notification.
- Regulatory Committee with Member States.
- If positive vote, scrutiny by EP and Council and adoption.



**Thank you for your attention**

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