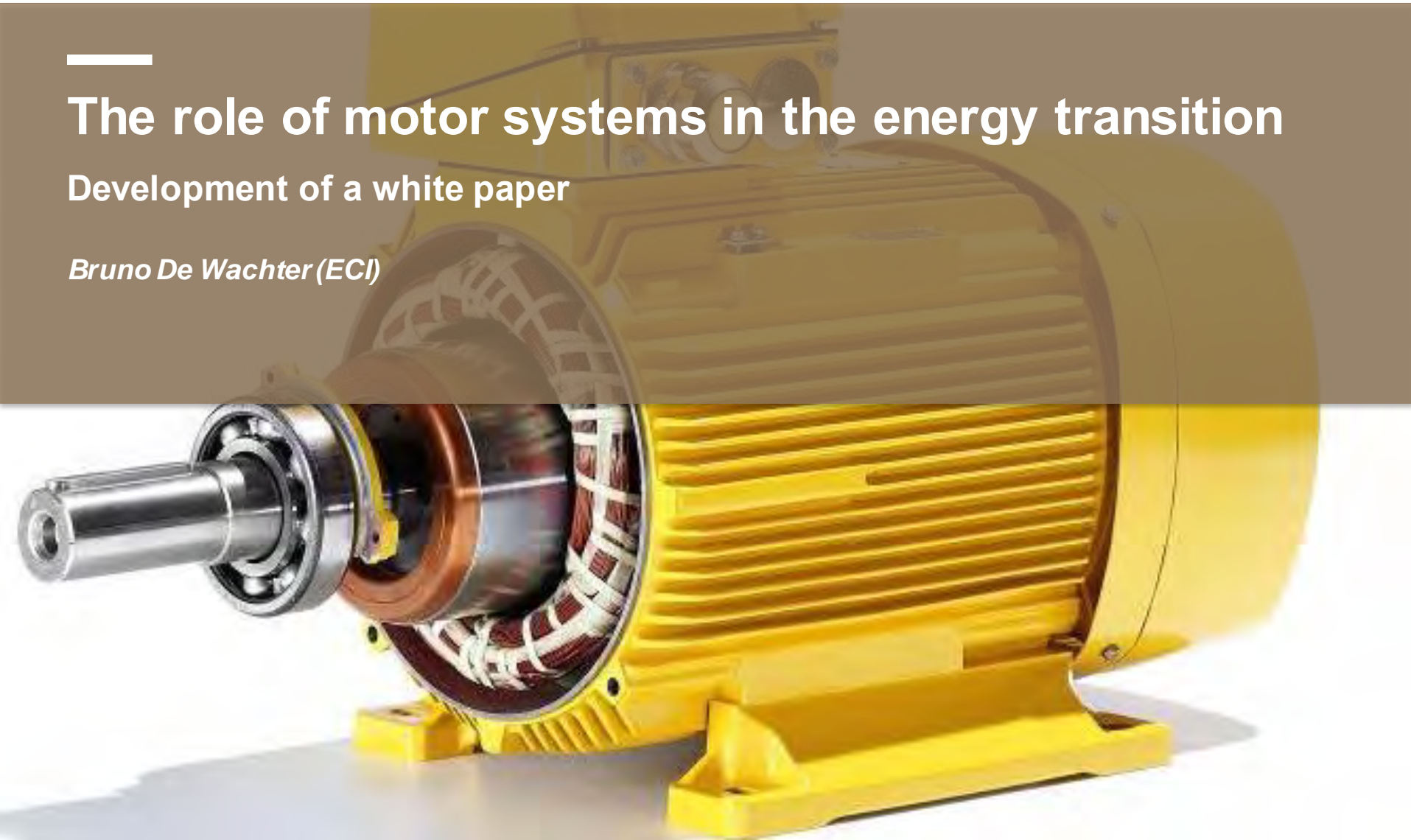

The role of motor systems in the energy transition

Development of a white paper

Bruno De Wachter (ECI)



Energy Efficient Motor Driven Systems

Cu

White paper published in 2004

Straightforward message:

savings potential
barriers
solutions

Substantial economic and environmental benefits

Substantial copper benefit

→ **Strong correlation between
public and copper interest**



The role of motors in the energy transition

Cu

2017: low hanging fruit has been harvested

Remaining savings potential is scattered among many sub-domains.

Correlation with copper interest not as straightforward as before

Taking one step up:

Motors will play a key role in the energy transition: electrification, flexibility, energy efficiency

Correlation between **Cu interest** and **the entire energy transition**



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- 1) We need **electrification** in the energy transition. The **number of electric motors** will increase substantially with electrification.
 - 2) With more motors around, efforts to **improve motor efficiency** will have an even bigger impact and should be continued.
 - 3) We support a **system's approach, LCC** and the **circular economy** principles for motor systems. They mean true sustainability.
 - 4) The new extended motor park can play a major role in **demand side flexibility**.
 - 5) **Energy savings and flexibility are win-win**: they make end-user investments pay back and soften the challenges for grid management.

→ Comments? Additions?

Policy recommendations

Cu

- 1) Continue with Eco-design regulation of motor systems (additional chapters + implementation)
- 2) Promote a system's approach and LCC thinking via energy management and energy audits
- 3) Create a market for demand side flexibility (removing barriers)
- 4) Stimulate electrification of transport (R&D and market development initiatives)
- 5) Stimulate electrification of heating (primary energy factor, incentives for heat pumps)
- 6) Increased emphasis on circular economy principles



→ Comments? Additions?

Call to action

- Anybody interested to operate as a peer-reviewer for this white paper?
- Useful input or contact persons for one or more of the chapters?

Thank you

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