

Decorative printed molecular-electrochromic systems



Description

Elevate printed graphics products through decorative applications for self-organised molecular electrochromic systems.





Objectives

- To evaluate environmental impacts in the manufacture of High Pressure Laminates (HPL),
- To define capital and operational costs resulting from the development and implementation of the electrochromic displays,
- To identify and assess social and socio-economic benefits/impacts of the innovative electrochromic products developed (e.g. well-being, health and safety, jobs creation, working conditions).

Activities

- Sustainability assessment:
 - Life-Cycle Assessment LCA,
 - Life-Cycle Costing LCC,
 - Social Life-Cycle Assessment SLCA,
- Market uptake & sustainable communication:
 - Social acceptance studies.

Challenges

- Input data complex to collect 
- Technical knowledge required 
- Legal & legislation barriers 
- Technology readiness level 

Expected outcomes

- - 70% switching times (electron injection from the electrodes to electrochromic materials), longer lifetimes in operation,
- Better contrast between different colour states,
- Identification of socio-economic benefits and barriers of the innovative electrochromic products, Comprehensive actions plan.

