

Printed paper-based electronics



Description

Innovative and smart printed electronics based on multifunctional paper, from smart labelling to point of care bio platforms.



Objectives

- To evaluate the environmental impact and check reliability for the production of paper-based genetic assays and to assess its cost benefit, to decide if the production lines are economically feasible to bring them to the market compared to commercial counterparts,
- To design tailor-made multifunctional paper and devices incorporating sustainability criteria and define the most suitable options to reduce environmental impacts.

Activities

- Sustainability assessment!
 - Life-Cycle Assessment LCA,
 - Life-Cycle Costing LCC,
 - Eco-design.

Challenges

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

Expected outcomes

- Advantage for European industries in competition with non-European low-cost countries,
- Use of cellulose as an electronic material for insulators, electrolytes, conductors and semiconductors,
- Reduction of the environmental impact of electronics.

