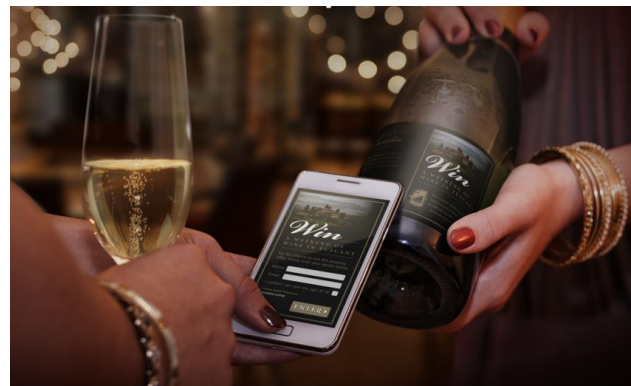


- Type: (Future) New Associate Partner
- Organisation: Specialty papers manufacturer, 3000 employees, 1 B€ in turnover
- Expertise: Paper manufacturing, specialty papers, security papers, smart papers, printed electronics, recycled circuitry, Paper PCB, smart labels, sensors, embedded & in mold electronics, Supercritical CO<sub>2</sub> treatments to functionalize paper



## Substrates Treatments via Supercritical CO<sub>2</sub> for functionalized products

On industrial manufacturing lines of paper substrates, numerous changes needed to produce a whole range of products leading to big wastes of materials, time lost, high stock quantity and big minimum order quantity.

=> **Idea**: produce a single substrate and proceed to « on demand » treatments (optical, conductive, hydrophobic, biocide, fireproof...), by using a supercritical CO<sub>2</sub> green process (no pollution, no waste liquid, no chemical lost).

- Expected synergies and complementarities: Other substrates manufacturers (sheets or reels) or chemicals companies.
- Outcomes: Build a common pilot to scale-up supercritical CO<sub>2</sub> treatments.
- Market & Business opportunities:
  - All sheets and reel manufacturers (textiles, papers, plastics...).
  - More than 10 000T of paper only for Arjowiggins.
  - Raw materials savings, productivity gains, working capital gains, commercial gains and access to new market segments for a total estimated to 4 or 5M€/year benefits.
- Partners already identified: CEA-Grenoble
- Wanted additional partners: Chemicals companies, equipment manufacturers...

# Substrates Treatments via Supercritical CO<sub>2</sub> for functionalized products

