

How to reduce CO₂ emissions of cathode manufacturing thanks to Kynar® HSV binders?

Battery cell metrics are commonly Wh/kg or Wh/L or Wh/€. It is becoming more and more common to take into consideration the carbon footprint of battery production. Arkema is committed to tackle the challenge of reducing CO₂ emissions linked to cathode manufacturing.



Kynar® CTO: launch in 2021 of a new sustainable Kynar® PVDF range: HSV900 and HSV1810 available as 100% renewable grades according to a mass balance approach of attributed carbon (ISCC+ certified) → **-20% CO₂ impact/kg of binder produced**



Local supply from the region to the region: plants in USA, France, China
Less transportation when serving our customers → **≈ -5% of CO₂ footprint**



Greener cathode manufacturing

Aqueous Kynar® latex available for cathode manufacturing

with LFP, NMC, Mn-rich active materials ...

3beLiEVe European project: >1000 cycles reached with Kynar® latex binder for LNMO electrodes

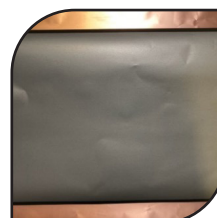


Funded by
the European Union

Kynar® fine powder available for dry process



**NMC622 with 3%
Kynar® PVDF**



**Graphite anode with 3%
Kynar® PVDF**

-20% CO₂ emissions for cathode manufacturing without drying step

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