LICAP Technologies’ patented activated dry electrode process has significant advantages to the traditional wet-slurry electrode process. We begin by processing a blend of activated materials and other ingredients to prepare a formulation with no toxic solvents. This formulation is fed into special equipment to create a free standing film with high density and tight thickness tolerance. This film is then laminated to coated aluminum foil on our high speed production equipment. There is no need for drying ovens, or solvent recovery systems. Any trimmings or excess film can be 100% recycled to eliminate unnecessary waste. The same process is applicable to the electrodes for Ultracapacitors, Lithium-ion Capacitors, Lithium-Ion Batteries and Water Filtration systems.
LICAP Activated dry process as compared to a wet slurry process for Lithium-Ion Battery:
To produce electrode for 1GWh of battery cells:

- **Ultracapacitor Activated Dry Electrode**
  - Production status: Mass production phase. 50m per minute.
  - Production location: Sacramento, CA USA.
  - Uniform active layer thicknesses available from 80 μ up to 150 μ.
  - High compacting density ranging from 0.68 to 0.75 g/cc.
  - Qualified for 2.7V-3V cells.

- **Activated Dry Battery Electrode**
  - Production status: Lab scale sample production.
  - Production location: Sacramento, CA USA.
  - Uniform active layer thicknesses available from 100 μ up to 250 μ.
  - High compacting density. Eg. NCM811 active layer reaches at 3.5 g/cc.
  - Formulation developed for NCM, LMO, NCA, LFP and graphite active materials.

- **Activated Dry Carbon Film for Water Filtration**
  - Production status: Lab scale sample production.
  - Production location: Sacramento, CA USA.
  - Uniform active layer thicknesses available from 150 μ to 420 μ.
  - High compacting density to 0.65 g/cc for a 400 um thick free standing active layer film.
  - Low film bulk resistivity (<1.5 [Ω cm]).

Please contact LICAP Technologies for samples, pricing, licensing options, partnerships and investment opportunities.