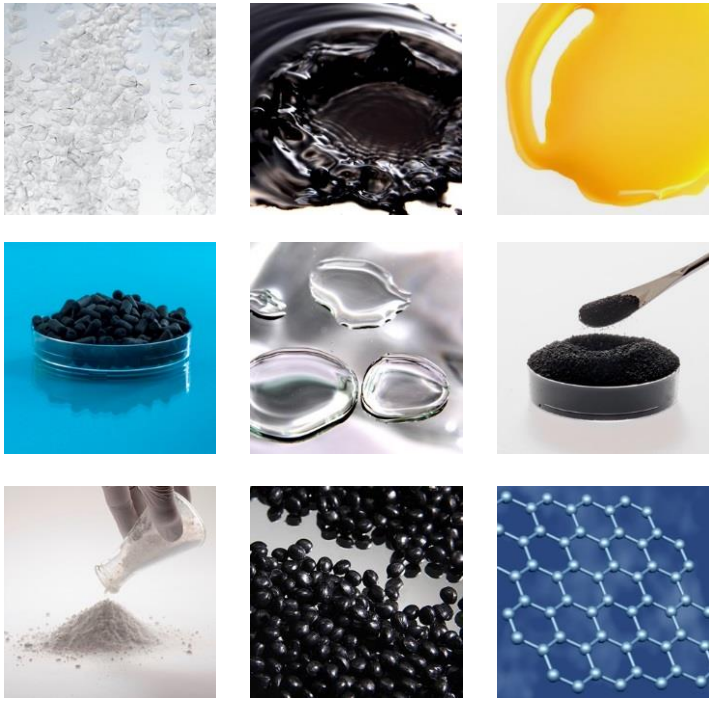
About Cabot Corporation

A rich and unique history



Over 130 years in operation

- Founded in 1882
- NYSE: CBT since 1968

Global specialty chemicals and performance materials company

- 44 manufacturing sites in 21 countries

Core technical competencies in fine particles and surface modification

FY2016 Sales: $2.4B

CABOT

Segments

Strong portfolio with leadership positions

REINFORCEMENT MATERIALS

- **Rubber blacks** tires, hoses, belts, molded goods
- **Elastomer composites** tires

PURIFICATION SOLUTIONS

- **Activated carbon** purification of air and water, food and beverages, pharmaceuticals, catalysts

SPECIALTY FLUIDS

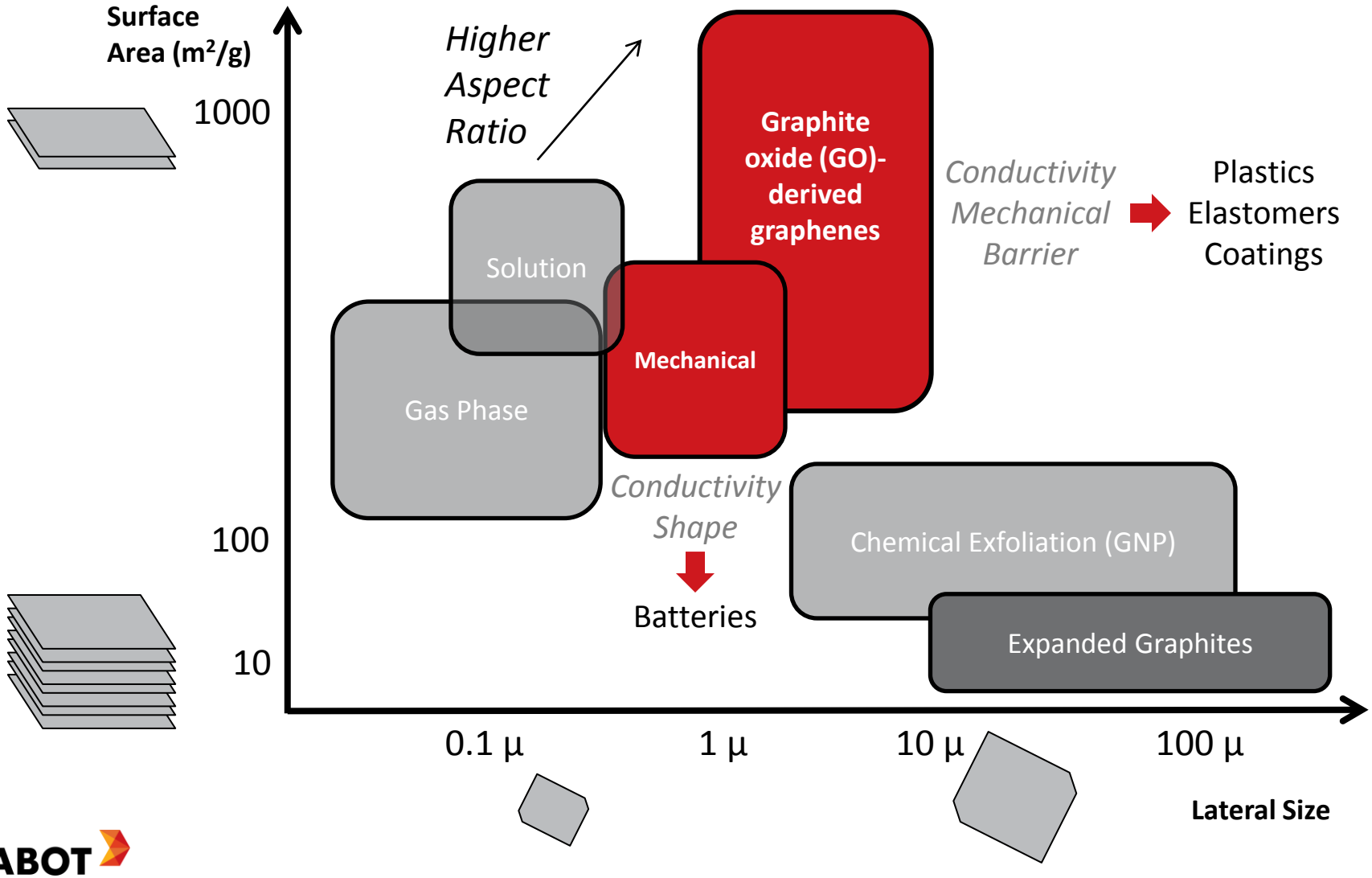
- **Cesium formate brines** oil and gas well drilling, completion fluids
- **Fine cesium chemicals** catalysts, titanium dioxide, glass, defense, automotive brazing flux

PERFORMANCE CHEMICALS

- **Specialty carbons** toners, coatings, adhesives, sealants, electronics, batteries, inks, plastic film and sheet, fiber, plastic molding, pipes, wire and cable, conductive plastics
- **Specialty compounds** masterbatches, conductive concentrates, conductive compounds
- **Fumed metals oxides** silicones, toners, composites, adhesives, sealants, coatings, polishing slurries
- **Aerogel** building and construction, coatings, industrial insulation, specialty chemicals, subsea pipelines
- **Inkjet colorants & inks** small office, home office, commercial and industrial inkjet printing

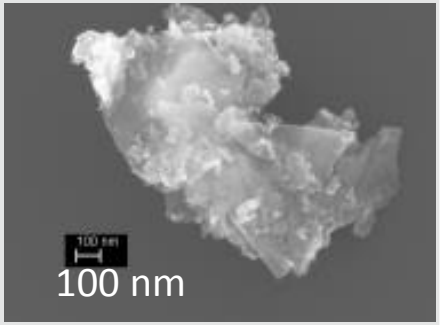
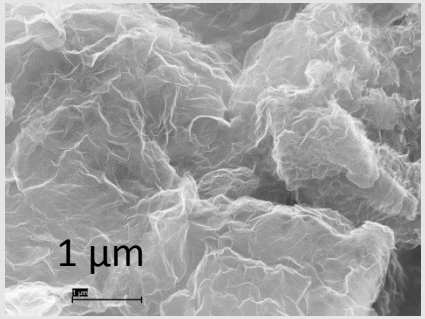
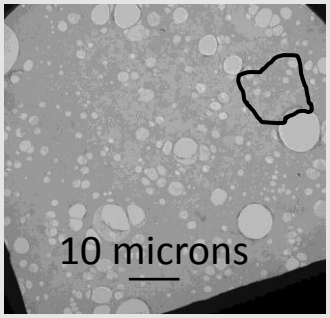
CABOT

Graphenes are “products by process”
Cabot investing in scalable technologies



CABOT

Graphenes have unique morphologies that deliver performance in different applications

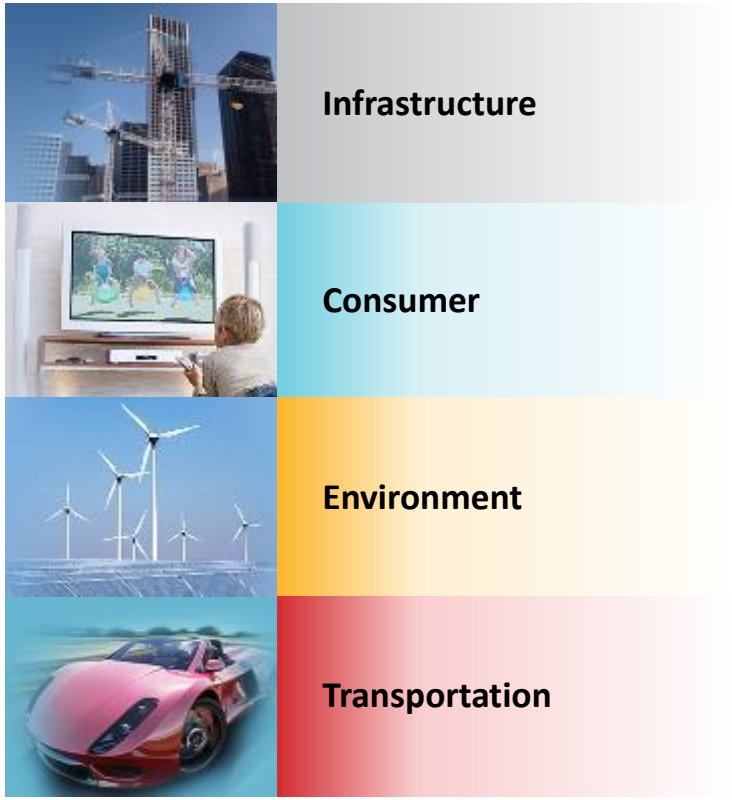
Process	Mechanical	GO-derived	GO-derived
Product	Graphene aggregates	Reduced Graphene Oxide (rGO)	GO nanoplatelets
			
Lateral size	< 2 µm	< 5 µm	< 10 µm
Surface area (m^2/g)	300-700	500-700	(aqueous only)
Surface chemistry	[O]<5%	[O]<15%	[O]~30%
Capabilities	Commercial	Pilot scale	Pilot scale

We design the surface chemistry, and delivery form (powder, concentrate, dispersion) to suit the end use

CABOT

Key messages

- Graphenes are a family of materials that offer multifunctional performance at low loadings.
- Cabot has invested in development of several key technologies for the production of graphenes.
- Initial adoption of graphenes in applications will be driven by applications where the value delivered greatly exceeds the cost.
- Incorporation and dispersion of graphenes drive performance. Formulated solutions containing graphenes as additives to the additives are most likely to break trade-offs.
- Toxicology of graphenes continues to be evaluated.
- Cabot is developing strong strategic partnerships to advance commercialization of these important materials in plastics, elastomers, coatings, energy storage and other high end applications.



CABOT