



BIOFUELS: EXECUTIVE SUMMARY

- ❑ Most major transport fuel consuming nations have biofuel support policies (incentives/targets) in place, typically favouring advanced biofuels
- ❑ However, while several structural drivers remain in place - climate change & energy security concerns – the biofuels sector has been hit by both cyclical forces (collapse in oil prices) and more importantly, secular forces (transport electrification)
- ❑ Global biofuels production & consumption is currently dominated by the US & Brazil (ethanol), followed by the EU (biodiesel); biodiesel consumption is relatively small and generally constrained by blending potential (with current engine legislation / designs)
- ❑ The strong interest in migrating from 1st gen (resource competitive) to (advanced) 2nd (cellulosic, including enzymes) and 3rd (e.g. algae ...) generation biofuel technologies/feedstocks has been diminished by oil price declines as well as major challenges at leading 2nd gen proponents
- ❑ 2nd gen biofuels present a relatively heterogenous technology landscape, causing some reticence to invest in “technology plays” (not yet proven to be commercially viable), given significant upfront (demo/pilot plant) and beyond CapEx requirements
- ❑ VC investment in the biofuel sector (especially commodity 1st-gen) plummeted after 2006, with 2nd/3rd gen investment now also very muted; the best change for a recovery being seen to be any potential rebound in oil prices
- ❑ Strategics – (bio)chemicals, oil majors, utilities ... – are essential co-investors (feedstock, offtake, project expertise ...) in the sector, especially for late-stage companies; even they have greatly reduced their activities in the sector