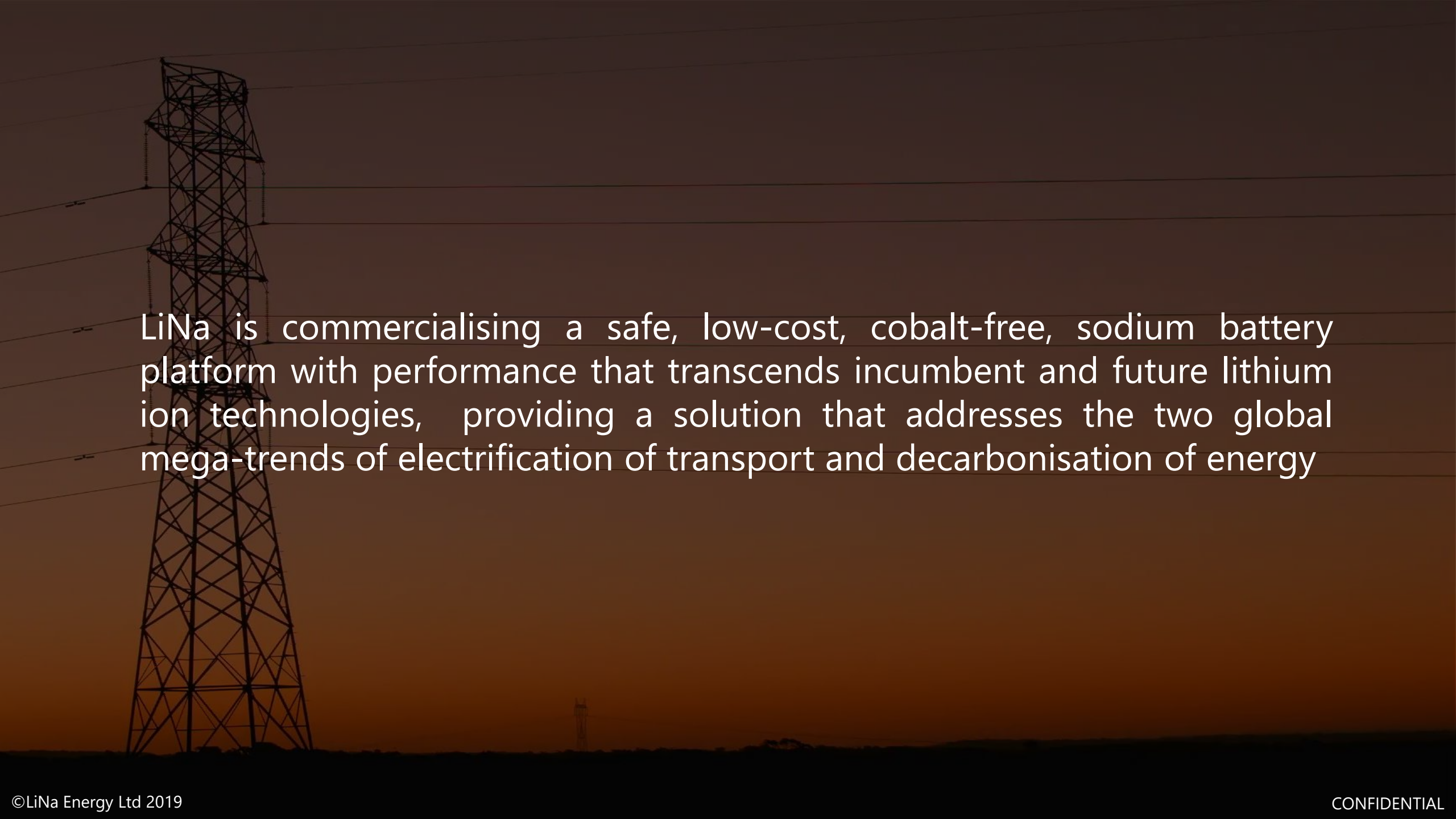

LiNa
energy



LiNa is commercialising a safe, low-cost, cobalt-free, sodium battery platform with performance that transcends incumbent and future lithium ion technologies, providing a solution that addresses the two global mega-trends of electrification of transport and decarbonisation of energy

Sodium Ion

LiNa Innovation

Current commercial Na-Ni-Cl battery technology vs Li batteries

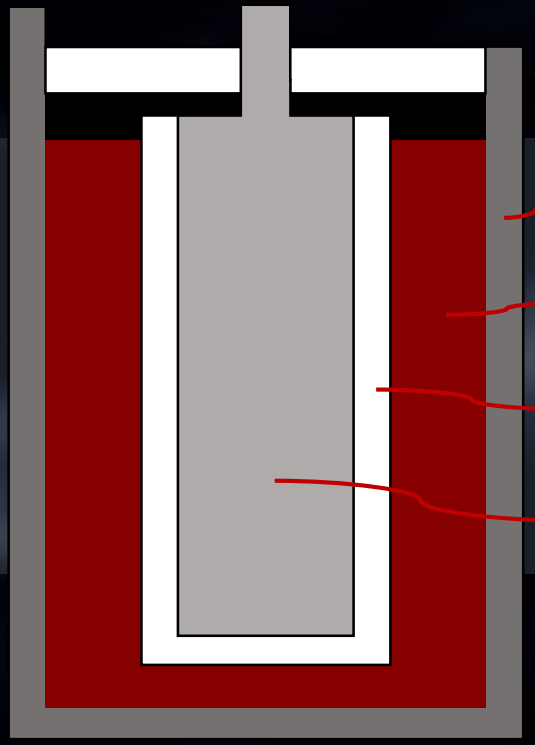
Advantages

Low cost - no Cobalt or Lithium
Non toxic, non flammable and non explosive
Robust and sustainable materials supply
Inherently safe and self regulating
Highly robust and - commercially proven long life

Disadvantages

GE “Durathon”- not changed in c.40 years!
Bulky, very low energy storage
Start up time = many hours
Does not allow efficient, low-cost, 6σ manufacture
Forgotten about

Out with the old, in with the new

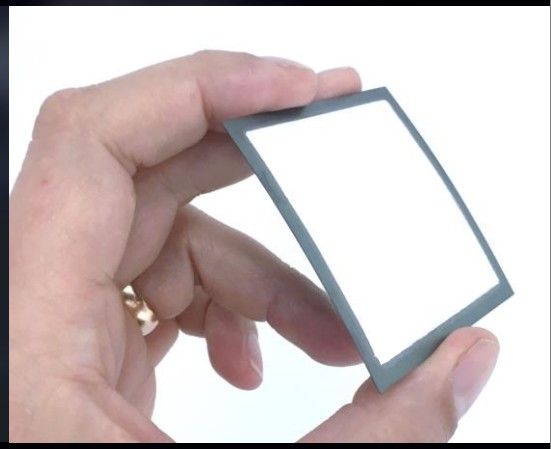


Outer casing

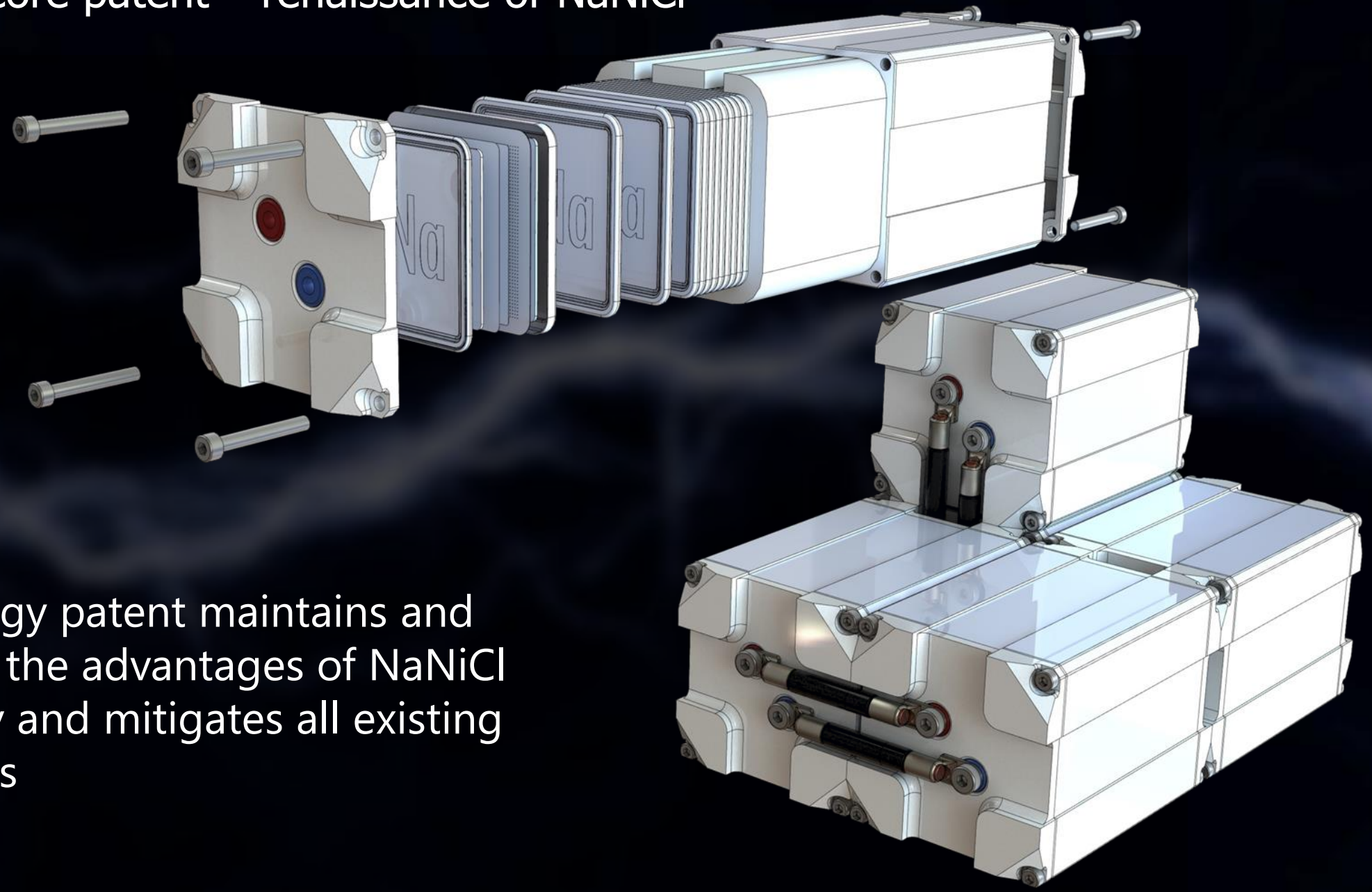
Na anode

Na-ion electrolyte

Ni cathode



LiNa Energy core patent – renaissance of NaNiCl



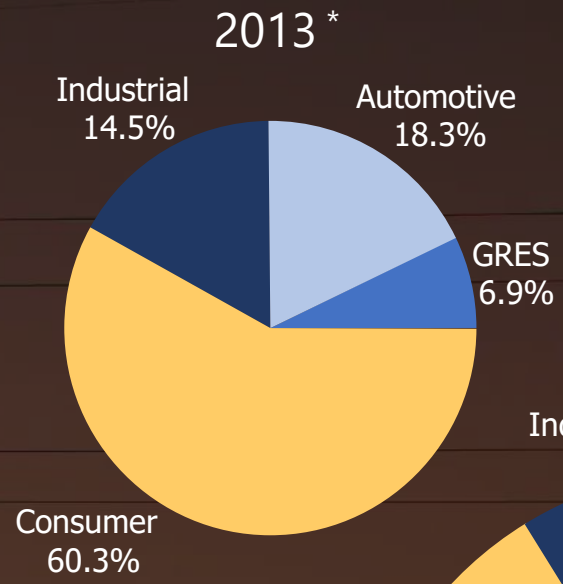
LiNa Energy patent maintains and improves the advantages of NaNiCl chemistry and mitigates all existing limitations

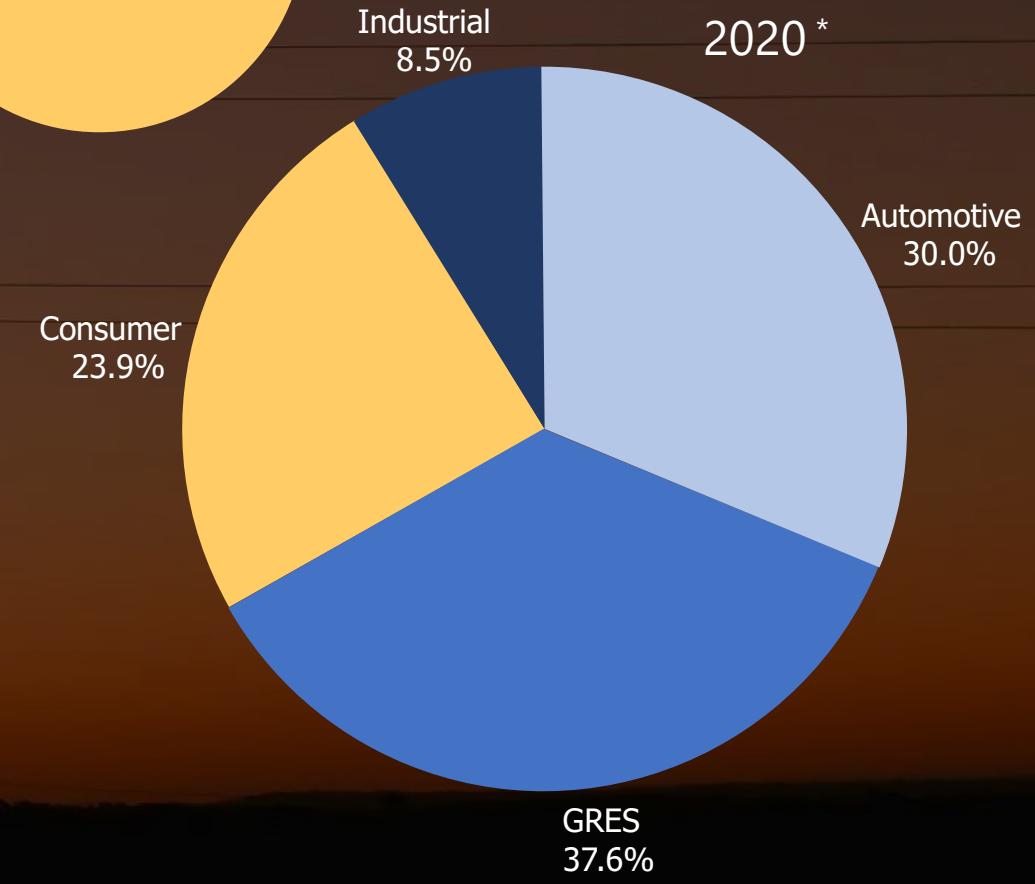
Commercial game-changing technology

Market opportunities – Lithium Ion

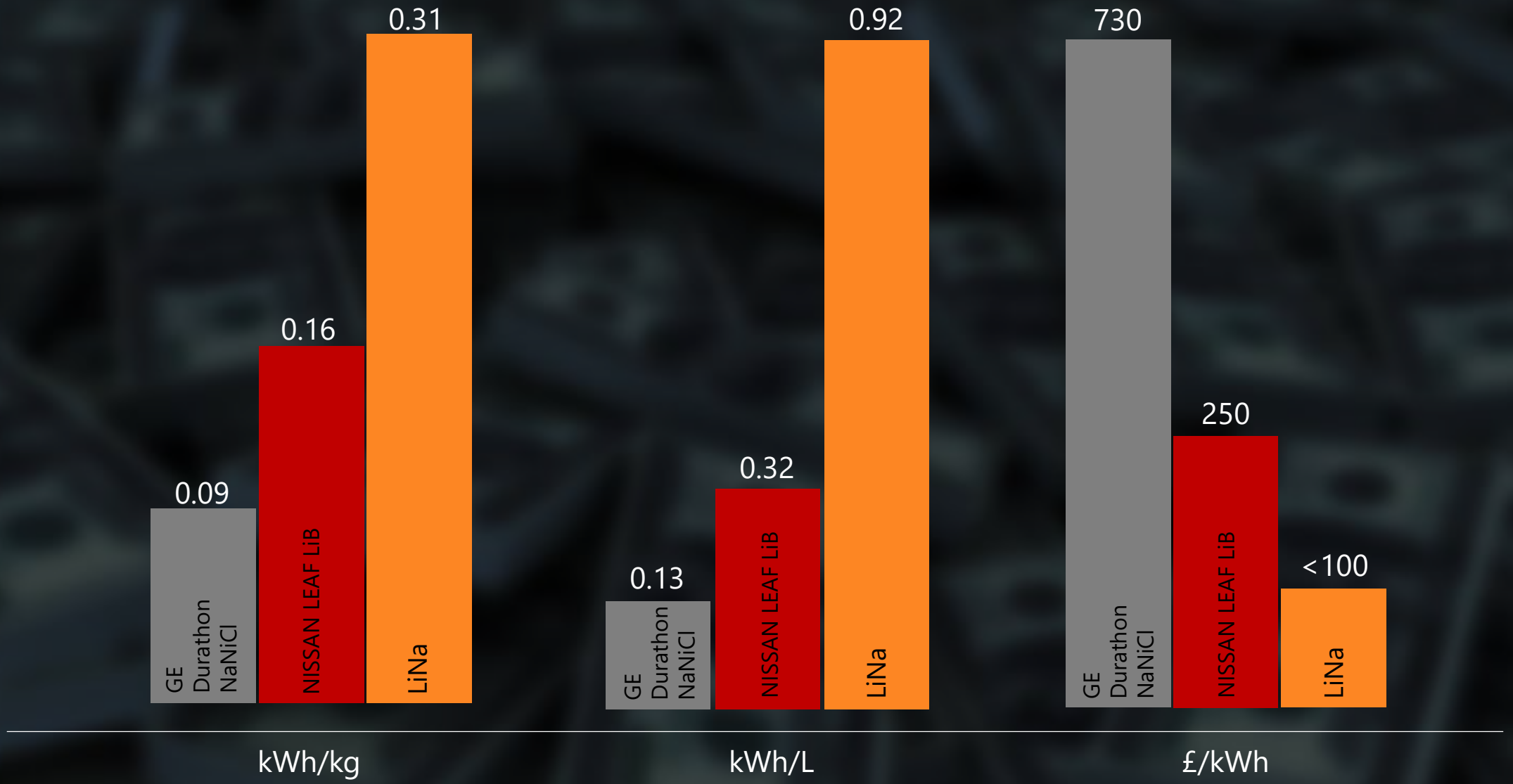
- LiB Industry ~$31B in 2017, expected to reach $60B+ by 2022
- Consumer electronics have dominated LiB market
- Automotive (30%) and Grid Renewable Electric Storage (GRES) 38% will become the dominant markets

* Frost & Sullivan





LiNa commercial advantages



Funding to date

Completed August 2018

Raise amount – £0.415M

Post-money valuation – £4.0M

Completed Q4 2019

Raise amount – £1.65M

Post-money valuation – £7.65M

Grant funding

Innovate UK Faraday Award - £0.25M – SUCESSFULLY COMPLETED

BEIS EEF – £1.0M – 18 month project - Started in September 2019

Summary

- Highly experienced and successful materials hi-tech start-up team
- Overlooked & established battery chemistry
- Modern material engineering, radically improves performance & cost
- Core patent filed – UK and International examination highly favourable
- Low technical risk – chemistry commercially proven
- Superior performance to Li-ion (and lead-acid batteries): cheaper and safer
- Large and growing global mass markets – GRES, EV
- Continued emphasis on non-dilutive grant funding
- Rapid progress to-date