

March 2022

Lithium-ion battery technological gadgets, has led

have reduced dramatically in recent

WHLHHD/WHWSHGWR
EIKGLQLHHW/DFLDW
GHHHTKHGWRO/KHSLD

HH/LMPLWBLHHW/HHV
WHHGHG/FBKZHR
VDF/HKZ/DKRWLHZ
@]cb' fY dchYbhU' Ug'cbY'cZH.Y'a cghg[b] Wbhf]g_ ZJMcfg'
hc'Vzbg]XYf'k \Yb' i bXYfk f]hb['VUHfmiZJMc'fmidfc'YVtg''

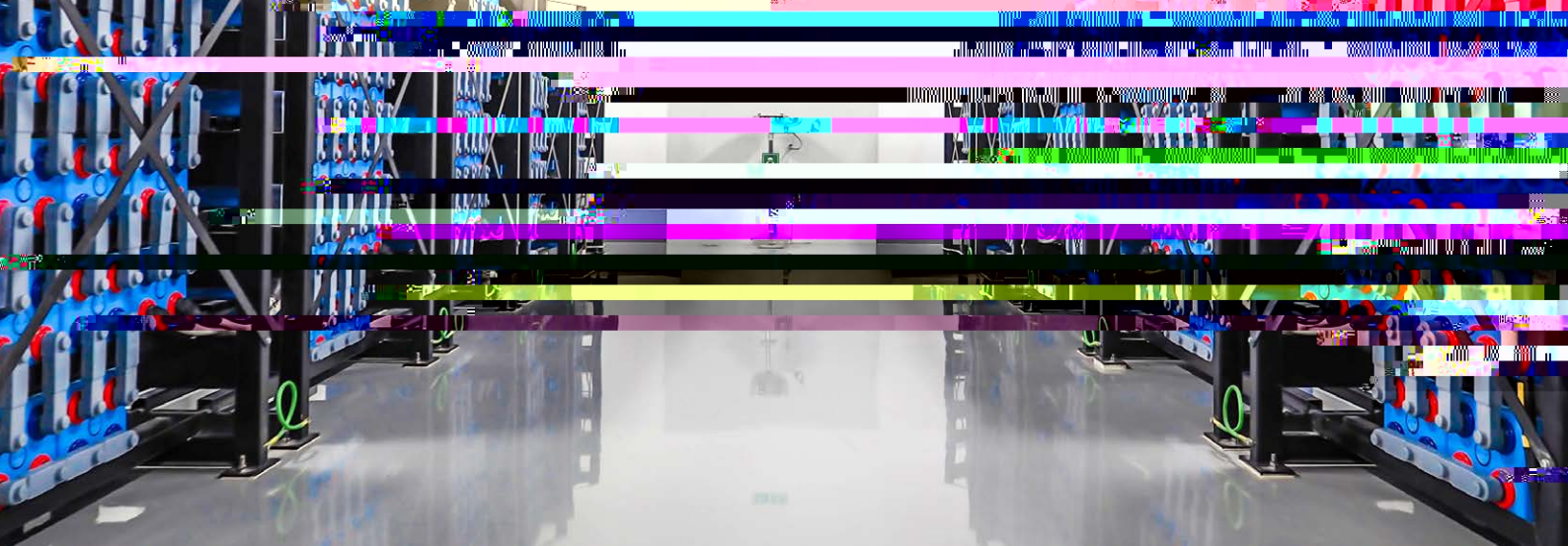
Moving away from the thermal runaway concerns, the dchYbhU'Zcf' fY hc'cW'f'UhUbmYUf']Yf'dc]bhXi f]b['

RISK AND INSURANCE CONSIDERATIONS

Fire and explosion

HWDEAWD/MHFW/DHS
WKKHW/WDFD/HGLESPW\
QWUKD/GHD/WKRO/LNOR
FWKRW/DLHFWGH

RHLDEHS/LD/WH/HFWL/QD
NSVWVKSHRL/WHVM
WHFHHFW/WKWR
FD/DFD/SLD/WLPWR/VL
FRVGHM/KESDQV



7'cgY UHfYbh]cb k]'' VY'dU]X hc' fY'gYdUfU]cb VYhK YYb h'Y' d'fcWggVi]X]b[g']h]gW ffYbhmVt'a a cb Zcf Vt'bbYV]cbg' to exist either directly or via bridge or conveyor systems.

-bgi fYfg'k]'' U'gc VY' _YYb hc' YghUV]g\ k \ Uh'h Y d'fcWXi fYg' UfY Zc'ck]b['U' fY'k]h]b h'Y ZUW]hmzUbX \ck h'YgY UfY' communicated to the workforce.

Defects and machinery breakdown

: cf h'Y Vt'bgf'i V]cb'cZUbmd'fcWgg]Xf]j Yb]bXi gh]U' d'fc YVt'z insurers will consider the level of defects and maintenance Vt'z Yf h'Uh'h Ymk]'' VY'k]'']b['hc' h'U_Y'cb/d'fYZf]b[' XY]Y'cdYfg'hc' fY'micb h'Y [i UfUbhYg'UbX'k UffUbh]Yg]ggj YX' Vm'h Y'gi dd']Yfg'UbX'a Ubi ZUW] fYfg';] Yb h'Y d'chYbh]U' for damage during testing and commissioning and initial cdYfU]cbg'z]h]g]a d'cfU]bh'hc' Vt'bg]XYf h'Y Y'Y'cZVt'z Yf' U[U]bghgi V'k UffUbh]Yg'z'h'i gYbgi f]b['bc'gdYVY' W[Udg]b' Vt'z Yf]b h'Y Y'Y' Ybh'cZU'a U'cf'cgg''

Building design is also, of course, of key interest and insurers k]'' h'U_Y' Vt'a Zcf]Z'h Y'Ybh]fY ZUW]c'fmd' Ubb]b['UbX XYg] b' is trusted to engineers and contractors who are highly Yl dYf]YbW'X]b h']g'gYVt'c''

Proto-typicality

@!]cb VUHfYfmd'fcXi V]cb'ci hdi h'Ug UWW'YfUHYX UhU' d\Ybca YbU'gdYXXZvi h'h YfY]g'gh]'' U'fUW'hc' ''XYa UbX'' 5g'gi Vt'z VUHfYfmi'hYVt'bc'c[m]UbX h'Y'a Ubi ZUW] f]b['d'fcWgg' UfY'UXj UbV]b['UhU'fUd]X'fUH''-bgi fYfg'UfY h'YfY ZcfY'dUn]b[' WfYZ' 'UHfYbh]cb hc' h'Y d'fcWgg'a Yh'cXc'c[m]b]c'j YX UbX' k \Yh'Yf Ubm'cZ]h'Wb VY XYa YX hc' VY d'fch'm]W]]b'Ubm k Un'i -bgi fYfg'k]''] YbYfU'mbch]bgi fY d'fch'm]W] f]g'g'UbX' k]'' fYei]fY h'Uh'Ubm'd'fcWgg' U'g'f'f'k]'']b h'Y bYUf'Z h' fYt' \Uj YZ'Ud'fcj Yb fYZYfYbW' d'Ubh'z'cf h'Uh'Ubm' fgh'cZU']bX' d'Ubhg' UfY'g]a d'mgW'Yli dg'cf U'h'fYbUh]j Y'UffUb[Ya Ybh'cZ existing technology. This will be key to obtaining the widest]bgi fUbW' d'fc[fUa a Y'Uh'h Y'ck YghVt'zgh''

Delay risk

-bgi fYfg'k]'' U'k Um'g'Wt'cgY'mYi Ua]bY h'Y d'chYbh]U' f]g' _UbX' Vt'bgYei YbW'g'cZXY'Unz'g'ci 'X'8Y'Um]b'GHUfHI d'fBGi t']bgi fUbW' VY'fYei YghYX Vm'h Y]bgi fYX' 'cf'a cfY Vt'a a cb'nz' fYei]fYX'Vmd'fc'YV'h'YbXYfg''

A Ubm]f]g'g' \Uj Y' h'Y d'chYbh]U' hc' Vt'bg]XYfU'V'm]a d'UW]h'Y' d'fc'YVt'z'g'YX' Y''7cbW'f'bg'UfY'Yi UW'fVUHfYX' U'g'VUHfYfmi a Ubi ZUW] f]b['cdYfU]cbg'a c'j Y'hc' \] [\!h'fci [\di h' Vt'bh]bi ci g'd'fcWgg'k]h' \Uf[Y'g]b['Y'a UW]bYg''

The trend in the Li-ion industry is towards new technology and larger factories to take advantage of economies of scale. However, this can lead to increased vulnerability to high delay

'cggYg'Xi Y'hc' h'Y'g'W'Y'UbX'i b]ei Y''cb[!'YUX'fYd'UW'a Ybh' h]a Yg'Zcf' _Ym'Yei]da Ybh''

-bgi fYfg'k]'' g'Y' _hc' i bXYfgh'UbX' h'Y VUg]g'cZ'h Y'fYj Ybi Y' stream in some detail. To that extent, the following]bZ'fa U]cb'k]'' Ugg]gh'h'Ya]b h'Uhd'fcW'gg.

- : i '' VfyU_Xck b'cZ'h Y' d'fc'YVW'X' fYj Ybi Y''
- 5ggi a dh]cbg'gh'fUHY []Yg'hU_Yb]b'hc' UW'Vt'i bh]b' h'Y' cdYfU]cb'cZ'h Y' ZUW]c'fmi
- Whether there is a degree of redundancy designed into the system.
- @UX h]a Yg'Zcf' h'Y fYd'UW'a Ybh'cZ'W]h]W' Yei]da Ybh''

-b' h'Y W'ffYbhVt'bgf'i V]cb']bgi fUbW' a Uf_Yhd'UW' h'YfY']g'_L_Y'mhc' VY']h'Y Udd'Yh]h'Y' hc']bgi fY h'Y Z' ''fYj Ybi Y' Vt'bgYei YbW'g'cZU'XY'Unz'UbX'XYj Y'cdYfg'g'ci 'X'Vt'bg]XYf' h']g'd'chYbh]U']b h'Y]f' d'fc'YVt'z' bUbV]U'a cXY''

Third party and environmental liability

5W]XYbh]g'U YV]b['@!]cb VUHfYfmi ZUW]c'f]Yg'Wb' U'gc' \Uj Y'U' a U't'f]a d'UW]c'cb h'Y d'fcdYf]h]Yg'c'f \YU'h' cZ'h]fX' d'Uf]h]Yg'' B'ch' cb'm'Wb h'Y X]fYVt'fYgi 'h'g'cZ' fY'W]i g'Y'U'g] b] Wb'h' Un'UfXz' but the common requirement for massive amounts of cooling water can have further consequences. Fire tests carried out Vm'h Y' B'Uh]cbU' :]fY' D'fch'V]cb' 5ggc'V]Uh]cb' fB : D5t'cb '@!]cb' VUHfYf]Yg'z' \Uj Y'g' \ck b' h'Uh]g] b] Wb'h'Ua ci bh'g'cZ' \nX'fc[Yb' i cf]XY' Wb' VY' fY'U'g'YX''K \Yb]b Vt'bh'U'Vt'h]h' k U'h'fZ'h]g' VYVt'a Yg' \nX'fc i cf]WUW]X' 'cbY'cZ'h Y'a cghVt'ffcg] Y' h'm]Yg'cZU'V]X'z'k \]W' Wb'U' YVt'fYg'd]f'U'c'f'm'g'h]Y'a g'UbX' Yj Yb' X]gg'c'j Y' ['Ugg''-bgi fYfg'bYX' hc' Z' ''mi bXYfgh'UbX' Ya Yf[YbVt'h d'fcWXi fYg'hc' U'g'W'f]U]b' \ck Z'Uf' h'Y Y' YVt'cb' h'Y'gi f'fci bX]b[' environment will be contained and controlled.

The impact of lenders, and operational insurance considerations

K \]Y'Yg'U]V]g'YX ['cVU' VUHfYfmi Ubi ZUW] f]b[' Vt'a d'Ub]Yg' Xc' b'chVt'a a cb'm'g'Y' _hc' f]U]g'Y XYVhU[U]bgh'h'Y]f' d'fc'YVt'z' h'YfY' UfY'a Ubm'Vt'a d'Ub]Yg'h'Uh'Xc' i h]]g'Y' d'fc'YVt'z' bUbW' UbX' U'g'gi W' b'YXX' hc' Vt'a d'mk]h' h'Y'fYei]fYa Ybh'g' b'U' mU] fYXX' k]h' 'YbXYfg' 5g]XY Z'fca h'Y' i gi U' ''YbXYf'fYei]fYa Ybh'g'z'h'Y' borrower needs to be conscious of the required commitment cZ'cdYfU]cbU']bgi fUbW'g'z'k \]W' 'a i gh'VY'a U]b'U]bYX' h'fci [\ci h'h'Y d'Yf]cX'cZ'h Y]f'c'Ub'U[fYYa Ybh''

Given that these commitments will commonly involve the d'fc'W'fYa Ybh'cZ'd'fcXi Vt'fYW'' UbX'']U]V]]m]bgi fUbW' ' U' \]g'h'f]W''mX] W' h'a Uf_Y'h'Zcf'@!]cb' d'fcXi W'fg' ' h'Y' borrower and their broker should carefully consider what they commit to lenders. They will also need to be cognisant cZ'h Y' YbXYfg' fYgi 'h'Ubhd'YfW'dh]cb'cZ'h Y'cdYfU]cbU' ' a Ubi ZUW] f]b['ZUW]]m]f]g' _d'fc' Y''

Joao Buzio

@5H5A FY[]cbU`7cbgfi V]cb`
Head, Construction,
-bZUghfi Vñ fy / 'Gi fyMzI ?ž
A Ufg\ 'GdYVU`hm
+44 (0)20 7357 3971

About Marsh

Marsh is the world's leading insurance broker and risk advisor. With around () žšš\$Vē`YU[i Yg`cdYfUhb[]b`% \$ countries, Marsh serves commercial and individual clients with data-driven risk solutions and advisory services. Marsh is a business of Marsh A VēYbbUb`fB MG9. A A 7ž`h`Y`k`c`f`X`g` `YUX]b[`d`f`c`Z`Y`g`g`c`b`U`g`Y`f`j`]W`g` fa`]b` h`Y`U`f`Y`U`g`c`Z`f`[`g`_ž`g`h`U`h`[`m`U`b`X`d`Y`c`d`Y`" With annual revenue nearly \$20 V]`]cbžA Ufg\` A VēYbbUb` \Y`dg`W]Yb`hg` navigate an increasingly dynamic and Vēa`d`YI`Ybj`]f`c`b`a`Y`b`h`h`f`c`i`[`\`Z`c`i`f` a`U`f`_`Y`H`Y`U`X`]b[`Vi`g`l`b`Y`g`g`Y`g` A`U`f`g`\`ž` ;`i`m` 7`U`f`d`Y`b`h`Y`f`ž`A`Y`f`W`f`U`b`X`C``]`Y`f`K`nā`Ub`" For more information, visit marsh.com, Zc`ck`i`g`c`b`@`b`_`Y`X`-`b`U`b`X`H`k`]`h`Y`f`c`f` gi`V`g`V`W]VY`h`c`6`F`-B`?"

This is a marketing communication. The information contained herein is based on sources we believe reliable and should be understood to be general risk management and insurance]b`Z`c`f`a`U`h`c`b`c`b`n`f`h`Y`]b`Z`c`f`a`U`h`c`b`]g`b`c`h`]b`h`Y`b`X`Y`X`h`c`V`Y`H`U`_`Y`b`U`g`U`X`j`]W`k`]h`f`Y`g`d`Y`W`h`c`U`b`m`]b`X`j`]Xi`U`g`l`h`U`h`c`b`U`b`X`V`W`b`b`c`h`V`Y`f`Y`]Y`X`i`d`c`b`U`g`g`i`V`W`"A`U`f`g`\`@`X`]g`U`i`h`c`f`]g`Y`X`U`b`X`f`Y`[`i`U`h`Y`X` V`m`h`Y`:`]b`U`b`V`U`7`c`b`X`i`V`ñ`5`i`h`c`f`]m`Z`c`f`:`Y`b`Y`f`U`-`b`g`i`f`U`b`W`8`]g`f`f`]V`i`h`c`b`U`b`X`7`f`Y`X`]h`6`f`c`_`]b`[`f`i`]f`a`f`Y`Z`f`f`b`W`B`c`" "\$+`)%&"7`c`d`n`f`[`\`h`]&\$&&A`U`f`g`\`@`X`"F`Y`[]g`h`Y`f`Y`X`]b`9`b`[`U`b`X`U`b`X`K`U`Y`g` Bi`a`V`Y`f`.%`\$`+`&`+`(`ž`F`Y`[]g`h`Y`f`Y`X`c`W`.%`H`c`k`Y`f`D`U`W`K`Y`g`ž`H`c`k`Y`f`D`U`W`ž`@`c`b`X`c`b`97`F`)`6`l`" " 5`" `f`[`\`h`g`f`Y`g`Y`f`j`Y`X`"7`c`d`n`f`[`\`h`]&\$&&"&& ,`'`-`(`&`*`+`%`-`"