

Action Summary – 22 November 2021

Analyst Theodore R. O'Neill – Advancing Li-ion battery technology - Reiterate Buy raising target to \$7

- **KULR reported 3Q21 revenue and an EPS loss of \$601K and \$0.03 respectively.** Consensus was expecting slightly better revenue and an EPS loss of \$633K and \$0.01, respectively. Reported results were better than our revenue and EPS loss estimates of \$500K and \$0.03, respectively.
- Company continues to focus on near-term commercialization opportunities for its Li-ion battery thermal management and energy solutions. Longer-term it is building total battery safety solutions for more efficient battery systems that increase sustainability and improve end-of-life battery management
- The company has added staff, tripling employee count this year. We are raising our expenses and margin expectations and lowering 4Q revenue making our new 2021 revenue and EPS loss estimates \$2.4MM and \$0.11, respectively versus our previous revenue and EPS loss estimates of \$2.5MM and \$0.11. For 2022 we are lowering our EPS loss to \$0.10 from \$0.11 on no change in revenue.
- We are raising our price target to \$7 from \$5. The company has been executing on plan and expanding its markets, lowering, in our opinion, product acceptance risk. Therefore, we are lowering the discount rate we use to calculate our price target to 8.5% from 10% and this results in the price target moving to \$7 from \$5.
- Although the shares trade on par with peer averages, on the basis of discounted future earnings, we feel the shares are undervalued.

11/19/21 Closing price: \$3.07	Market cap: \$321 million	2022 P/E: NMF	2022 EV / Sales: 26
Shares outstanding: 104.7 million	Insider ownership: 37%	3-month avg. trading volume: >1MM	Dividend/Yield: NA/NA

GAAP estimates (EPS excluding deemed dividend in dollars – Revenue in thousands)

Period	EPS	Revenue	GP Margin
1Q20A	\$(0.01)	\$195	67%
2Q20A	\$(0.01)	\$56	79%
3Q20A	\$(0.00)	\$527	55%
4Q20A	<u>\$(0.01)</u>	<u>\$52</u>	<u>81%</u>
FY20A	<u>\$(0.03)</u>	<u>\$830</u>	<u>73%</u>
1Q21A	\$(0.02)	\$418	34%
2Q21A	\$(0.03)	\$628	30%
3Q21A	\$(0.03)	\$601	74%
4Q21E	<u>\$(0.03)</u>	<u>\$750</u>	<u>60%</u>
FY21E	<u>\$(0.11)</u>	<u>\$2,397</u>	<u>51%</u>
1Q22E	\$(0.03)	\$1,500	50%
2Q22E	\$(0.03)	\$2,000	50%
3Q22E	\$(0.03)	\$2,000	50%
4Q22E	<u>\$(0.02)</u>	<u>\$3,000</u>	<u>50%</u>
FY22E	<u>\$(0.10)</u>	<u>\$8,500</u>	<u>50%</u>

Note: Numbers may not add due to rounding. See our full model in the back of this report.

Cash balance (in thousands)

• 2019A	• \$109
• 2020A	• \$8,880
• 2021E	• \$9,513
• 2022E	• \$1.195

Debt (in thousands)

• 2019A	• NA
• 2020A	• 2,332
• 2021E	• NA
• 2022E	• NA

Adj. EBITDA (in thousands)

• 2019A	• (\$2.0)
• 2020A	• (\$2.4)
• 2021E	• (\$10.7)
• 2022E	• (\$10.7)

Risks/Valuation

- Risks include: Highly competitive business; changes in customer demand, commercialization of technology
- Our \$7 target is derived using a discounted future earnings model.

Company description: KULR Technology Group, Inc. (OTCQB: KULR) develops, manufactures and licenses next-generation carbon fiber thermal management technologies for batteries and electronic systems. Backed by a strong intellectual property portfolio, KULR enables leading aerospace, electronics, and electric vehicle manufacturers to make their products cooler, lighter and safer for the consumer.

Figure 1 – KULR Technology Group, Inc. – One-Year Trading snapshot



Source: FactSet

Valuation Methodology

We believe KULR is undervalued and we support that belief with two valuation techniques, one absolute and one relative. The following valuation techniques are being used:

- 1) The discounted value of all future earnings was used for our price target (see Figure 2)
- 2) Valuation relative to peers (see Figure 3)

Discounted Future Earnings – Basis for Price Target

Our 12-month price target of \$7 is based on a discounted earnings model. For valuation purposes, we sum up all future earnings discounted at 8%. This is down from our previous discount rate of 8.5 due to the company's success in advancing its technology. We are making two main assumptions:

- Near-term rapid growth for earnings which steps down to GDP after 7 years
- Company reaches breakeven in 2023

Our valuation model is shown in Figure 2 below. Note, this model understates future new products and growth through acquisitions and probably understates the tax benefits, but offsetting that, the earnings never have a down year. The implied share price is \$6.65 which we round up to \$7.

Figure 2 - KULR Technology Group, Inc. - Discounted Future Earnings

Discounted Earnings			\$ 6.65
	Year 1 is 2021	Forecast EPS	Discounted EPS
	1	(0.11)	(\$0.11)
	2	(0.10)	(\$0.09)
	3	0.20	\$0.16
	4	0.30	\$0.22
	5	0.45	\$0.31
	Terminal Value		\$6.16

Source: Litchfield Hills Research LLC

Valuation Relative to Peers

In Figure 3 we look at a summary of metrics for KULR peers. If we compare KULR to a simple average of its peers, the shares sell, on average, on par. One thing common to the companies on the list is that they have high gross profit margins and companies with high gross profit margins tend to trade for higher sales multiples. A very high multiple for KULR isn't extraordinary. Details on each of the peers can be found in Figure 5 near the back of the report.

Figure 3 – KULR Technology Group, Inc. – Valuation Relative to Peers

	2022 EV / Sales	2022 Sales Multiple
Average	21.56	31.95
KULR	25.29	26.59
Premium/(Discount) to peers	17%	(17%)

Source: Litchfield Hills Research LLC and Refinitiv Eikon (Formerly Thomson Reuters Eikon)

Guidance and Financial Forecasts

The company is not providing guidance. It appears to us that it has sufficient cash to get through 2021, but we assume there is a small capital raise in 2022 to fund growth. Our financial forecast assumes a slow growth in revenue. The company has been pulling together solid business relationships with companies that will use KULR products. Those companies, however need to execute on their production plans.

Quarterly Results

As shown in Figure 4 (below), KULR reported 3Q21 revenue and EPS of \$601K and a loss of \$0.03. Revenue was better than our expectation of \$500K and EPS loss was in-line with our \$0.03 estimate.

Figure 4 – KULR Technology Group, Inc. – Quarterly Variance Analysis (\$000)

	2021	2021	
	Q3E	Q3A	Better/(worse) than forecast
Income Statement			
Total Revenue	\$500	\$601	\$101
Total cost of revenue	250	155	95
Total Gross Profit	250	446	196
Operating expenses:			
R&D	400	482	(82)
General and administrative	2,500	3,104	(604)
Total Expenses	2,900	3,586	(686)
Earnings (loss) from Operations	(2,650)	(3,140)	(\$490)
Total Other income/(expense)	(200)	45	245
Earnings before taxes	(2,850)	(3,096)	(246)
Tax expense/(benefit)	0	0	0
Net income	(\$2,850)	(\$3,096)	(\$246)
Deemed dividend for Series C			
Net income attributable to shareholders			
EPS	\$ (0.03)	\$ (0.03)	(\$0.00)
EPS plus deemed dividend			
Diluted common shares	92,627	99,019	(6,392)

Source: Litchfield Hills Research LLC

Figure 5 – KULR Technology Group, Inc. – Comp Table

FactSet Ticker	Company Name	Closing Price	Market Cap \$MM	EV \$MM	2022 Consensus Multiples	
					EV /Sales	Market Cap / Sales
NVX-AU	NOVONIX Ltd	\$7.09	3,420	2,508	32.46	44.22
ABML-US	American Battery Technology Company	\$1.32	834	647		
RMO-US	Romeo Power Inc	\$4.51	605	332	1.62	6.60
BLNK-US	Blink Charging Co	\$43.08	1,816	1,632	41.50	50.13
RIVN-US	Rivian Automotive, Inc. Class A	\$128.60	110,654	115,898		
TSLA-US	Tesla Inc	\$1,137.06	1,141,909	1,272,063	18.17	16.29
QS-US	QuantumScape Corporation	\$34.66	11,289	13,106		
FSR-US	Fisker Inc	\$21.28	3,487	5,580	23.79	29.40
IPWR-US	Ideal Power Inc.	\$16.05	95	74	72.83	110.60
ENVX-US	Enovix Corporation (US Listing)	\$35.82	5,201	4,452		
SOLO-US	Electrameccanica Vehicles Corp	\$3.36	386	155		24.20
FUV-US	Arcimoto, Inc.	\$10.55	396	347	11.86	14.66
RIDE-US	Lordstown Motors Corp	\$5.06	973	674	2.89	5.06
LICY-US	Li-Cycle Holdings Corp.	\$13.84	2,258	519	9.32	40.56
MVST-US	Microvast Holdings, Inc.	\$8.94	2,687	319	1.15	9.70
	AVERAGE				<u>21.56</u>	<u>31.95</u>
KULR-US	KULR Technology Group Inc	\$3.07	226	215	25.29	26.59
	KULR-US Premium to peers:				17%	-17%

Figure 6 – KULR Technology Group, Inc. – Income Statement (\$000)

December year-end	2018	2019	2020A	2021E				2021E	2022E				2022E
	Year	Year	Year	Q1A	Q2A	Q3A	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Year
Total revenue	\$1,274	\$830	\$624	\$418	\$628	\$601	\$750	\$2,397	\$1,500	\$2,000	\$2,000	\$3,000	\$8,500
<i>Growth</i>		-35%	-25%	439%	212%	339%	260%	284%	259%	218%	233%	300%	255%
Cost of Goods	337	227	169	275	439	155	300	1,170	750	1,000	1,000	1,530	4,280
Gross Profit	937	604	455	143	189	446	450	1,227	750	1,000	1,000	1,470	4,220
Gross Margin	73.6%	72.7%	72.9%	34.1%	30.1%	74.2%	60.0%	51.2%	50.0%	50.0%	50.0%	49.0%	49.6%
Operating Expenses													
R&D	\$508	\$502	\$290	\$123	\$353	\$482	\$500	\$1,458	\$500	\$500	\$500	\$500	\$2,000
% of total revenue	40%	60%	46%	29%	56%	80%	67%	61%	33%	25%	25%	17%	24%
General and administrative	\$2,511	\$2,081	\$2,506	\$1,493	\$2,723	\$3,104	\$3,100	\$10,421	\$3,100	\$3,200	\$3,300	\$3,400	\$13,000
% of total revenue	197%	251%	402%	357%	433%	517%	413%	435%	207%	160%	165%	113%	153%
Total Operating Expenses	3,019	2,583	2,795	1,616	3,076	3,586	3,600	11,878	3,600	3,700	3,800	3,900	15,000
Operating Income	(2,082)	(1,979)	(2,340)	(1,473)	(2,887)	(3,140)	(3,150)	(10,651)	(2,850)	(2,700)	(2,800)	(2,430)	(10,780)
Operating Margin		-238.4%	-375.1%	-352.5%	-459.5%	-522.6%	-420.0%	-444.3%	-190.0%	-135.0%	-140.0%	-81.0%	-126.8%
Total Other Items	23	(0)	(510)	(242)	(140)	45	0	(337)	0	0	0	0	0
Pre-Tax Income	(2,058)	(1,980)	(2,850)	(1,715)	(3,027)	(3,096)	(3,150)	(10,988)	(2,850)	(2,700)	(2,800)	(2,430)	(10,780)
Pre-Tax Margin			-456.8%	-410.3%	-481.8%	-515.2%	-420.0%	-458.4%	-190.0%	-135.0%	-140.0%	-81.0%	-126.8%
Taxes (benefit)	0	0	0	0	0	0	0	0	0	0	0	0	0
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income	(2,058)	(1,980)	(2,850)	(1,715)	(3,027)	(3,096)	(3,150)	(10,988)	(2,850)	(2,700)	(2,800)	(2,430)	(10,780)
Deemed dividend for Series C			(\$2)	\$0	(\$2,624)	\$0	\$0	(\$2,624)	\$0	\$0	\$0	\$0	\$0
Net income attributable to shareholders			(\$2,852)	\$0	(\$5,651)	\$0	\$0	(\$13,612)	\$0	(\$2,700)	\$0	\$0	(\$10,780)
EPS	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.11)	(0.03)	(0.03)	(0.03)	(0.02)	(0.10)
EPS plus deemed dividend	0.00	0.00	0.00	0.00	(0.06)	0.00	0.00	(0.14)	0.00	(0.03)	0.00	0.00	(0.10)
Diluted Shares Outstanding	77,642	80,123	82,032	90,079	92,513	99,019	104,700	96,578	105,000	105,000	105,000	105,000	105,000

Figure 7 – KULR Technology Group, Inc. – Balance Sheet (\$000)

December year-end	FY2022E	FY2021E	FY2020E	FY2019	FY2018
Balance sheet					
Current Assets					
Cash and S.T.I.	\$1,195	\$9,513	\$8,880	\$109	\$230
Accounts receivable	1,000	800	55	30	112
Inventories	400	200	55	27	10
Other assets	500	500	150	43	55
Total Current Assets	3,095	11,013	9,142	209	406
Net PP&E	200	100	58	28	45
Goodwill & Intangible	0	0	0	0	0
Other non-current assets	800	813	9	0	0
Total Assets	\$4,095	\$11,926	\$9,208	\$237	\$451
Current Liabilities					
Accounts payable	\$1,000	\$500	\$69	\$349	\$118
Accrued exp. & other	\$1,000	\$700	\$395	\$659	\$374
Deferred revenue	\$0	\$0	\$20	\$15	\$0
Other current liabilities	\$500	\$400	\$2,463	\$0	\$0
Total current liabilities	2,500	1,600	2,947	1,034	576
Notes payable	0	0	142	0	0
Other Liabilities	600	550	0	0	0
Total Liabilities	3,100	2,150	3,090	1,034	576
Stockholders' Equity					
Preferred stock	0	0	0	0	0
Common stock	9	10	9	8	8
Additional paid-in-capital	34,000	32,000	17,356	7,591	6,284
Retained earnings	(33,014)	(22,234)	(11,246)	(8,396)	(6,417)
Cum. Other comp and treasury stock	0	0	0	0	0
Total stockholders' equity	995	9,776	6,119	(797)	(125)
Total Liabilities and equity	\$4,095	\$11,926	\$9,208	\$237	\$451

Source: Company reports and Litchfield Hills Research LLC

Figure 8 – KULR Technology Group, Inc. – Cash Flow (\$000)

	FY22E	FY21E	FY20A	FY19
Net Income	(\$10,780)	(\$10,988)	(\$2,850)	(\$1,980)
Accounts receivable	(200)	(745)	(25)	82
Inventories	(200)	(145)	(28)	(17)
Other assets	0	(350)	(107)	11
PP&E	(100)	(42)	(30)	17
Goodwill & Intangible	0	0	0	0
Other non-current	13	(804)	(9)	0
Accounts payable	500	431	(280)	231
Accrued exp & other - related party	0	0	(10)	(74)
Accrued exp. & other	300	305	(264)	285
Deferred revenue	0	(20)	5	15
Other current liabilities	100	(2,063)	2,463	0
Notes payable	0	(142)	142	0
Other Liabilities	50	550	0	0
Common stock	(1)	1	1	0
Additional paid-in-capital	2,000	14,644	9,765	1,308
Cum. trans. adj. and treasury stock	0	0	0	0
Dividends	0	0	0	0
Total Cash Flow	(8,318)	633	8,771	(121)

Source: Company reports and Litchfield Hills Research LLC

Disclosures:

Analyst Certification

We, the Litchfield Hills Research Department, hereby certify that the views expressed in this research report accurately reflect our personal views about the subject company and the underlying securities.

FINRA Compliant Research Report

We, the Litchfield Hills Research Department, hereby certify that this report is compliant with FINRA research rules 2241, 3110, the analyst is registered with FINRA and the report has been reviewed by a Supervisory Analyst.

MiFID II Compliant Research Report

Our research is classified as minor non-monetary benefit under MiFID II. This applies to all forms of transmission, including email, website and financial platforms such as Bloomberg, FactSet, S&P Global, Refinitiv, Wind and 13 others. We do not seek payment from the asset management community and do not have any execution function. Investors can continue to receive our research under the MiFID II regime without the need for a contract for services to be put in place. This applies to all forms of transmission, including email, website and financial platforms.

Litchfield Hills Research LLC Rating System

BUY: We expect the stock to provide a total return of 15% or more within a 12-month period.

HOLD: We expect the stock to provide a total return of negative 15% to positive 15% within a 12-month period.

SELL: We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

Other Disclosures

Litchfield Hills Research, LLC (“LHR”) is not a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission nor a member of Financial Industry Regulatory Authority. The principal of LHR and publisher of this report, Theodore R. O’Neill, is a registered representative of Ascendant Capital Markets, LLC (“Ascendant”), a registered broker-dealer and FINRA member firm. Ascendant considers Mr. O’Neill’s association with LHR to be an “outside business activity” and is disclosed as such with FINRA. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject LHR or any divisions, subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction.

All material presented in this report, unless specifically indicated otherwise, is under copyright to LHR and the subject company. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of LHR or the subject company. All trademarks, service marks and logos used in this report are trademarks, service marks, registered trademarks, or service marks of LHR or its affiliates. The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. LHR may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice or a representation that any investment or strategy is suitable, appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. LHR does not offer advice on the tax consequences of investment and you are advised to contact an independent tax adviser. LHR believes the information and opinions in the Disclosure Appendix of this report are accurate and complete. Information and opinions presented in this report were obtained or derived from sources LHR believes are reliable, but LHR makes no representations as to their accuracy or completeness.

Ownership and Material Conflicts of Interest

The analyst owns no shares of the subject company. The analyst and his family have no known material conflicts of interest in authoring this report. No employees of Ascendant Capital Markets, LLC own any material amount of KULR stock or have any influence on the KULR Board of Directors.

Investment Banking and Fees for Services

Litchfield Hills Research has not received compensation for advisory or investment banking services from the Company in the past 12 months. Ascendant Capital Markets, LLC has not received compensation for advisory or investment banking services from the Company in the past 12 months. Litchfield Hills Research LLC has received compensation from the company for distribution and investor targeting services. Ascendant Capital Markets, LLC has not received compensation for non-investment banking services from the Company in the past 12 months.

Market Making

Neither Litchfield Hills Research, LLC nor Ascendant Capital Markets, LLC makes a market in the subject company’s securities.

Additional information is available upon request. LHR accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that liability arises under specific statutes or regulations applicable to LHR. This report is not to be relied upon in substitution for the exercise of independent judgment.