



William L. Jones, Chairman
Board of Directors
Alto Ingredients, Inc.
1300 South Second Street
Pekin, Illinois
61554

June 29, 2023

Dear Mr. Jones,

Entities I manage are beneficially interested in 775,000 shares of Alto Ingredients, Inc (hereafter ‘Alto’ or ‘the Company’). I write today to request the Board immediately consider all strategic alternatives, and principally 1) pursue the divestment of the Columbia and Magic Valley facilities (‘the Western assets’); and then 2) sell the core integrated Pekin facility (‘Pekin campus’) to the highest bidder via a competitive auction. The financial returns of such a course are self-evident: **even a conservative market valuation of our Company’s assets would, I believe, yield north of \$6.5 per share, or ~135% higher than recent traded prices.** The Pekin campus is a uniquely strategic, locationally advantaged asset, and would undoubtedly garner serious purchase interest from numerous strategic and financial buyers.

But beyond pure price appreciation for shareholders, there is an overwhelming industrial logic to pursuing this plan, as Alto has neither the capital resources; the time; nor the track record, to effect its corporate transformation as a public company. Current traded prices – at but a fraction of tangible book and historical invested capital – only underline our Company’s structurally punitive cost of equity. As such, the market essentially demands that the crown jewel Pekin asset be shepherded into the hands of a better-capitalized owner. And having spoken with over 20% of the register, it would appear a plurality of the shareholder base – deeply fragmented as it is – would support value realization in the near-term, over and above the quixotic pursuit of deeper, uncertain upside in the far future.

A near-term sale would deliver a 135% premium and certainty of value

The primary reason to embark upon this strategic course is because it would deliver immediate, certain value, and a gargantuan price premium, to current traded prices. Alto equity today trades

at roughly 52 cents per gallon on an enterprise value basis²; by contrast, larger competitors have stated that not even \$1.50 per gallon valuations get bidders into second-round bidding on well-invested ethanol assets, and that replacement value – which I understand to be in excess of \$2 per gallon – is eminently achievable for integrated wet mills of scale (such as Alto’s Pekin campus).³ The resultant valuation math here is simple: divesting Alto’s Western assets at trough valuations, even just blended \$1.70 per gallon on the 250mm gallon capacity Pekin campus achieves an equity valuation of \$6.52 – **a massive 135% premium to recent traded prices**.⁴ Given the quality of the Pekin campus, these price levels strike me as conservative outcomes in any competitive auction process.

The Inflation Reduction Act has transformed the market value of the Pekin campus

Why are third-party buyers so willing to pay above-historical prices for ethanol assets today? The passage of the Inflation Reduction Act (‘IRA’) last August has completely changed the value-in-use proposition of ethanol plants, such that there is now a ready and available pool of buyers looking to deploy capital into extant, high-quality carbon capture and sequestration (‘CCS’) opportunities. Whilst all ethanol facilities produce high-purity carbon dioxide as an off-gas (as part of the biogenic fermentation process), Alto’s Pekin campus is ideally situated near saline aquifer structures in the Illinois basin – a necessary pre-requisite to capture and sequester the carbon – making it perhaps the perfect site to monetize the IRA’s treasure trove of CCS-related credits. The Pekin campus could either pursue ‘direct inject’ – sending the carbon directly into aquifers below the site, thereby owning most all the economics of the project – or pipe its carbon dioxide, once captured, to one of the world’s largest, and proven, sequestration sites – *conveniently located a mere 70 miles away as the crow flies in Decatur, Illinois*.⁵ Transportation cost constitutes the main bottleneck limiting carbon capture economics – thus explaining Pekin’s unique locational advantage and likely strong attraction to prospective buyers.

Once decarbonized, Pekin’s ethanol could be sold into LCFS markets like California, or Oregon (or Canada), monetizing further state-level credits at almost zero incremental cost. Beyond that, there are further revenue opportunities like ethanol-to-jet (that is, the chemical conversion of ethanol to sustainable aviation fuel), where the IRA is offering up to \$1.75 per gallon of subsidy. With commodity ethanol selling for about \$2.4 per gallon today, the value uplift offered by this

² See Appendix A for full sum-of-the-parts valuation math.

³ See Green Plains Inc., Q4 2022 Investor call (February 8, 2023): [CEO Todd Becker] ‘What we’re seeing out there, at least at the scale plants, the big plants that we -- that have been built over 100 million gallons is strong interest that we’ve seen on processes that are happening in the market today. We’re hearing that some people aren’t even making the second rounds of some of these asset sales because they’re bidding what were traditional values that we were able to buy in the past, and they’re not making it to the second round. So we’re hearing very strong values almost towards original replacement values, even though today, it would cost a lot more to rebuild a platform like ours.’

⁴ See Appendix A.

⁵ Archer Daniels Midland operates the Decatur site and has been safely sequestering carbon dioxide for over a decade. See <https://www.adm.com/en-us/standalone-pages/adm-and-carbon-capture-and-storage/>

potential conversion and subsidy revenue is truly transformational, even if a few years out, and it is this mid-term deep upside that is driving ethanol asset valuations to new highs.

In totality, the IRA is a veritable subsidy bonanza that, even ignoring many of the secondary or tertiary opportunities like ethanol-to-jet, could generate **over \$140mm in EBITDA and \$100mm in net income at the Pekin campus alone, while offering investment paybacks as low eight months.**⁶ At my stated acquisition multiple of \$1.70 per gallon (on Pekin), a prospective acquirer would be paying around 3.2x EV/EBITDA (before further monetization opportunities) – far below the multiples typically paid for renewable-fuel assets in recent transactions.⁷ As such I believe these kinds of prices are eminently achievable, if not higher, should the company proceed to run an auction imminently.

Alto's stand-alone cost of capital is punitive

But these returns are largely only available to an acquirer because, it must be said, our Company is inadequately capitalized to pursue this transition as a stand-alone, public company. Despite being debt free last year – after several years of cleaning up the balance sheet through asset sales – our CFO made the strange decision last fall to draw down debt financing at usurious terms: 10% plus a 1.5% original issue discount, plus an equity kicker, all for senior secured paper.⁸ More egregiously, this financing cannot be used for any capex related to carbon capture, and thus instead seems largely dedicated to the Company's other myriad projects, many of which relate to the structurally-challenged Western assets!

Funding the best-return, highest-upside carbon projects will consume at least another \$85mm – and this is money Alto frankly does not have. Management has protested that working capital remains a viable source of liquidity – forgetting of course that with First Lien senior secured cost of debt now established at an effective 11-12% rate, the terms on any inventory financing arrangement would be truly extortionary. Indeed, recent trading prices of ALTO equity – at a tiny fraction of tangible book and replacement cost – only serve to further evidence that the capital markets are well and truly closed to the company. **The simple reality is, as currently capitalized and financed, Alto should be a seller.**

Current management does not have the pedigree to execute this transformation

Management's poor historical capital allocation, and its horrendous long-term record of shareholder value destruction, are further important reasons why this business should be shopped

⁶ See Appendix B for Raper Capital estimates of the carbon economics at the Pekin campus.

⁷ For example, Chevron's acquisition of REGI in early 2022, at ~9x CY EV/EBITDA. See here: <https://chevroncorp.gcs-web.com/static-files/acf5b0f1-e8e3-415e-82ef-2b178128ec33>

⁸ See press release, November 7, 2022, 'Alto Ingredients Inc. Enters Into \$125 Million Term Loan Facility to Accelerate Business Transformation', <https://ir.altoingredients.com/news-events/press-releases/detail/598/alto-ingredients-inc-enters-into-125-million-term-loan>

now. Business transitions of this nature are inherently complex; even Green Plains, Alto's larger peer, with three times the installed capacity and a multi-year head start in value-added protein and carbon capture development, is running years behind schedule and has experienced teething problems in operational start-up at several of its plants.

But GPRE's recent troubles pale in comparison to the under-performance generated at Alto under current leadership. Mr Kandris, the CEO, has essentially run the Company since early 2013 (as COO), at which point ALTO equity traded for \$5.70 a share; today the price is \$2.40, **generating a -56% total shareholder return**. Whilst there may well be extenuating circumstances, Mr Kandris has been spared much if not all of this lost decade, having acquired 80% of his ~900,000 shares through stock grants and having been paid almost \$8mm total compensation during this time.⁹

Indeed, one wonders if management is truly aligned with shareholders, given the curious reticence around decarbonization economics – a truly transformative development that should be front and center both of Alto's investment plans and equity story. Our Company has been much slower than other public peers in pursuing the carbon-related opportunity; and as yet has not even publicly delineated how they will monetize the 45Z tax credits newly enhanced by the IRA (the core value-creating provisions from that document). Instead, management appears hell-bent on pursuing all manner of divergent projects, on a shoestring budget and without the attendant clarity of focus that a new owner would necessarily bring. Shareholders should feel rightly aggrieved with equity performance, both mid- and long-term, and deserve at the very least to have a market test conducted, to then ascertain if they wish to continue subscribing to management's disparate investment agenda; or otherwise sell up for a massive premium and move on.

It is crucial to sell the business now

And make no mistake: time is of the utmost essence. Much of the decarbonization windfall beckoning Alto is time-limited and expires in 2027 – beyond that date, producers will have to have decarbonized and moved on to derivative subsidy streams like ethanol-to-jet. Moreover, the commodity ethanol business is – for the moment at least – in a period of rude health, with crush margins strengthening aggressively in recent months after a horrific 2022 and start to 2023; and input costs having receded substantially from the highs endured last year. This inflection would allow Alto to pursue strategic alternatives from a position of strength, engaging with only the highest-quality counterparties whilst the commodity ethanol business is generating ample cashflow.

⁹About 727,000 of Mr Kandris' 898,000 shares were granted via stock grants. See <https://www.bamsec.com/filing/121390023027230?cik=1442099>, <https://www.bamsec.com/filing/121390022017452?cik=1442099> <https://www.bamsec.com/filing/121390020018883?cik=1442099>.

For a summation of Mr Kandris' total compensation during this period, see Appendix C.

But ethanol is nothing if not volatile, and Alto's balance sheet remains capital constrained. One bad corn harvest and much of the market improvement witnessed in recent months would evaporate, such that our Company could well then become a distressed seller of otherwise premium assets. It is therefore crucial to hire bankers with alacrity, such that the ample value still residing in the Pekin campus can be harvested, to the benefit of all long-suffering shareholders.

A plurality of the register would support a sale

In closing, lest management consider this letter merely the frustrated outpourings of a solitary shareholder, I can personally assure the Board that, having sought feedback from over 20% of the register, this call to action would likely be applauded by a plurality of the shareholder base. I draw attention to the fact that this year alone, **over 143mm ALTO shares have traded – almost twice the entire shares outstanding – at average prices well below \$3 a share.** Any sales process that results in a >100% premium over cost for a large majority of the register would likely find overwhelming support from the register today. I would encourage you to liaise with your larger active shareholders of record as you consider this request. Understanding the urgent nature of the situation, and cognizant of the composition of the register, I would further underline that Board renewal and reconstitution remain viable options to be pursued, should management not act with the necessary alacrity in pursuing the course outlined herein.

I remain at your disposal to discuss any and all topics enclosed.

Very sincerely yours,

A handwritten signature in blue ink, appearing to read 'Jeremy Raper', with a stylized flourish at the end.

Jeremy Raper

Appendix A: ALTO sum-of-the-parts valuation

	Capacity (mm gallons)	\$/gallon	Value (\$mm)
Pekin Wet	100	2	200
Pekin Dry	60	1.5	90
Pekin ICP	90	1.5	135
Total Pekin Campus	250	1.70	425
Magic Valley	60	0.4	24
Columbia	40	0.4	16
Total non-Pekin			40
		Total asset value =	465
		Net debt	60
		Net working capital	91
		Value to ALTO =	496
		Shares out	76.1
		Value per share =	6.52
		<i>Current stock px</i>	<i>2.8</i>
		<i>Upside %</i>	<i>133%</i>
		<i>Current \$/gallon</i>	<i>\$0.52</i>
		<i>Current \$/gallon ex W/C</i>	<i>\$0.78</i>

Appendix B: Estimated carbon capture economics at Pekin campus¹⁰

(\$mm)	Notes	
CCS infra build cost	50	management, third party estimates. CCS infra, liquefaction, connection to pipeline
Cogeneration build cost	35	additional boilers, CHP to leverage steam + lower CI (monetize 45Z)
Total capital investment	85	
45Z		
Starting CI	60	
CCS improvement	-29	GPPE estimates
Cogen improvement	-6	GPPE estimates
Ending CI	25	before farmer decarbonizatio, etc
Delta vs 50 CI threshold	25	Per IRA rules
<i>45Z gross value - per gallon</i>	<i>0.5</i>	at 2c per CI point
45Z gross value - Pekin	125	250mm gallon capacity at Pekin campus
less direct opex	-25.2	assume \$40/ton, low end of for power generation assets (CO2 natural by-product)
less transport cost	-1.5	NETL estimates \$2.07/ton per 100km of pipeline
less storage cost	-12.6	NETL range \$8-20/ton based on geologic formation; assume \$20/t
EBITDA - 45Z only	85.7	ignore 45Q given superiority of 45Z credits (mutually exclusive)
45Z EBITDA per gallon	\$0.24	
LCFS		
Revenues - LCFS credits	63	CA, WA, OR, Canada assume \$100/t, like GPPE now
less costs to deliver/access	-6.3	some cost to monetize credits in relevant state markets? SWAG \$10/ton
EBITDA - LCFS only	56.7	
LCFS EBITDA per gallon	\$0.16	
Total Carbon Capture EBITDA	142.4	ignore 45Q; further CI improvement in 45Z; and <i>ignore SAF entirely</i>
Carbon Capture EBITDA per gallon	\$0.41	versus \$0.46 per gallon EV implied at current prices
Less depreciation	-4.3	assume 20 year straight line depreciation on capital invested
EBIT =	138.2	
Tax at 25%	-34.5	assume no further tax benefit, no debt/project financing etc
Net income =	103.6	
Implied payback (years) - project level	0.8	

¹⁰ Company filings; GPPE filings; Raper Capital estimates based on company filings and third-party research (NETL reports, etc).

Appendix C: Michael Kandris total compensation, 2013-22¹¹

	Cash	Stock Awards	Total
2013	\$403,598	\$112,179	\$515,777
2014	\$474,181	\$176,588	\$650,769
2015	\$331,660	\$166,943	\$498,603
2016	\$427,535	\$186,081	\$613,616
2017	\$388,683	\$171,025	\$559,708
2018	\$364,101	\$146,325	\$510,426
2019	\$369,145	\$64,400	\$433,545
2020	\$568,900	\$181,025	\$749,925
2021	\$1,171,356	\$707,392	\$1,878,748
2022	\$619,237	\$874,035	\$1,493,272
Total =	\$5,118,396	\$2,785,993	\$7,904,389

¹¹ Derived from annual company proxy filings.