



Pre-IPO Coverage: Livent (LTHM)

Lithium producer Livent (LTHM) will IPO on Thursday, October 11. At a price range of \$18-\$20/share, the company plans to sell up to \$460 million in stock to the public that will result in a market cap of ~\$2.7 billion. At the midpoint of the IPO range, LTHM currently earns our [Neutral rating](#).

LTHM is profitable – unlike a record [83% of IPOs so far this year](#) – but the company still faces significant challenges. The lithium producer, which is being spun-off of parent company FMC Corporation (FMC), faces significant pricing pressure and is overvalued when compared to other mining companies.

This report aims to help investors sort through Livent's financial filings to understand the fundamentals and valuation of this IPO.

Get the best fundamental research

A (Sort of) Bet on Electric Vehicles

LTHM is a spinoff of diversified chemical company FMC, which will receive all the proceeds of the IPO and retain control of ~85% of LTHM's shares.

LTHM describes itself as a “pure-play, fully integrated lithium company.” The company extracts lithium brine from the Salar del Hombre Muerto mine in Argentina, and it refines that lithium into a variety of compounds at manufacturing facilities around the world.

Most of the press surrounding LTHM focuses on its ties to the electric vehicle (EV) market, but that remains a minority of its business for now. In 2017, sales of lithium hydroxide for EV batteries accounted for just 24% of revenue. The other 76% of revenue came from sales of other lithium compounds used in industrial processes and pharmaceuticals.

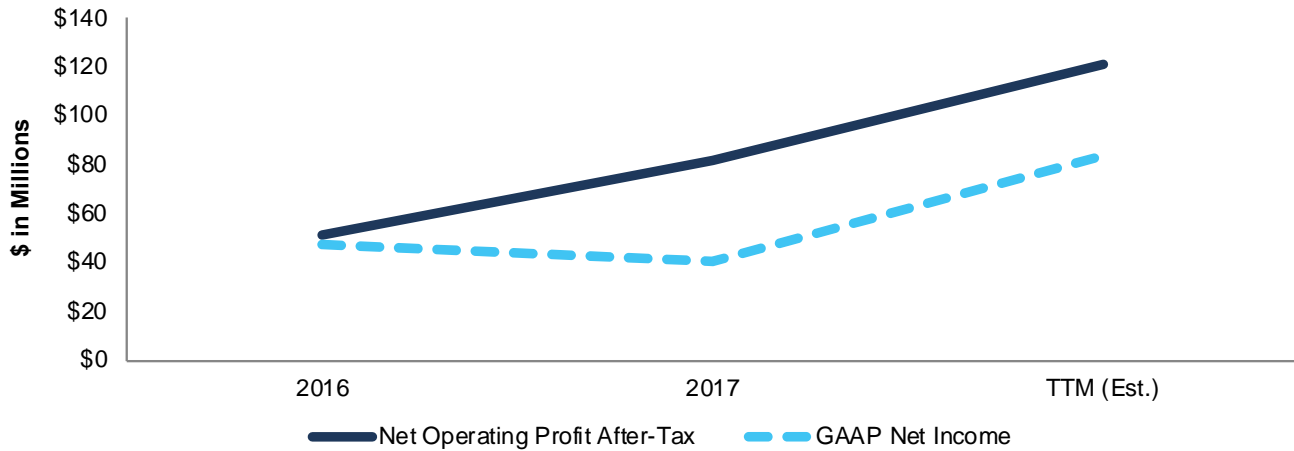
Still, the EV market represents the primary growth driver for LTHM. Tesla (TSLA) gets most of the attention in this sector, but many other automakers are ramping up their EV production as well. Demand for lithium hydroxide is projected to grow by 44% compounded annually over the next decade, [according to research firm Roskill](#). Figure 1 shows that LTHM's after-tax operating profit (NOPAT) grew from \$51 million in 2016 to \$82 million in 2017, a 61% increase. It also shows that NOPAT has continued to grow to an estimated \$121 million over the trailing twelve months.¹

¹ LTHM's S-1 does not give us enough information to definitively calculate its NOPAT over the TTM period.



Figure 1: LTHM GAAP Net Income and NOPAT Since 2016

The Disconnect Between Income and NOPAT



Sources: New Constructs, LLC and company filings

Figure 1 also shows that reported earnings significantly understate LTHM’s profitability. Two unusual items – a [\\$31 million](#) pension settlement expense and a [net \\$11 million charge](#) from tax reform, which combined account for 10% of revenue – artificially reduce LTHM’s reported 2017 and TTM earnings.

Oversupply Could Hurt Margins

LTHM plans to capitalize on the increased demand for lithium hydroxide by dramatically increasing its production. The company [stated in its S-1](#) that it plans to increase production capacity from 18.5 thousand metric tons in 2017 to 55 thousand metric tons in 2025, a threefold increase.

Unfortunately for LTHM, it’s not alone in increasing its lithium production. The rise in demand has led to a boom in new lithium mining production. New mines are coming online [around the world](#), and key competitor Sociedad Química y Minera de Chile (SQM) could [increase its production by 4-6 times](#) over the coming years.

All this new supply has led to a crash in lithium prices. In China, which accounted for 32% of LTHM’s revenue through the first six months of 2018, [lithium prices fell](#) from ~\$25 thousand per ton in March to \$13 thousand per ton in August, a 47% drop.

Falling lithium prices could hurt LTHM’s margins and put a damper on its planned increase in production. Potential investors should be concerned about this fact because, as we’ll show below, there’s significant growth already baked into the proposed IPO valuation.

LTHM Holds Potential Competitive Advantages

Despite its status as a commodity producer, LTHM has certain competitive advantages that could allow it to continue to earn high margins and profits even as lithium supply increases dramatically.

Most notably, LTHM should have a significant cost advantage compared to most of the new lithium producers entering the industry. According to the same [Roskill report](#) referenced above, LTHM is the lowest cost lithium hydroxide producer in the world, primarily due to the attractive location of its Argentinian mine, which is located on a salt flat. Extracting lithium brine from salt flats is significantly cheaper than mining hard rock lithium, which constitutes a large share of the new lithium production coming online.

In addition, LTHM is an integrated lithium producer, meaning it manufactures lithium compounds in addition to extracting the raw materials. The company has over 60 years of expertise in lithium compound production, which should give it a competitive advantage over newer producers.

It remains to be seen how significant or durable these advantages are, but they should at least allow LTHM to maintain superior profitability compared to other lithium producers for the foreseeable future.



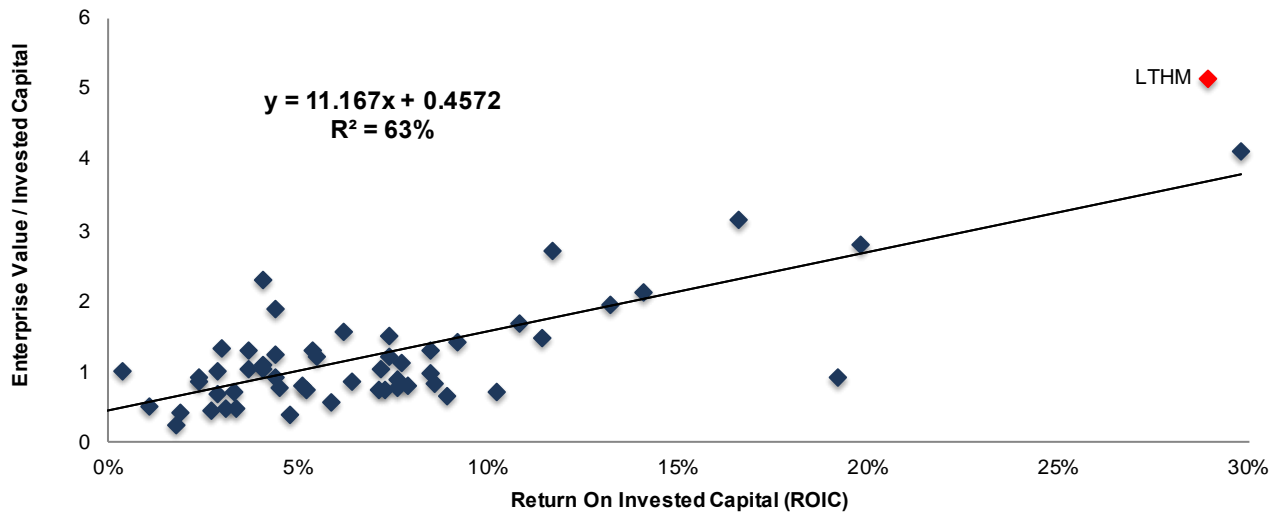
LTHM is Overvalued Compared to Peers

Numerous case studies show that getting return on invested capital (ROIC) right is an important part of making smart investments. Ernst & Young recently published a white paper that proves the material superiority of our forensic accounting research and measure of ROIC. The technology that enables this research is featured by Harvard Business School.

Per Figure 2, ROIC explains 63% of the difference in valuation for the 61 Metals and Mining companies under coverage. LTHM trades at a significant premium to its peers based on its position above the trendline.²

Figure 2: ROIC Explains 63% of Valuation for Metals and Mining Companies

Regression Analysis Shows LTHM Is Overvalued



Sources: New Constructs, LLC and company filings

Based on its current enterprise value per invested capital (a cleaner version of price to book) of 5.1, the market expects LTHM's ROIC to increase to 42%. Notably, no other company in the industry has earned an ROIC above 38% in any single year over the past five years.

Our Discounted Cash Flow Model Shows Potential Downside for LTHM

Our dynamic DCF model shows that the future cash flow expectations baked into LTHM's are optimistic, but not impossible.

To justify the midpoint of its IPO range at \$19/share, LTHM must maintain 2017 NOPAT margins of 24% and grow revenue by 15% compounded annually for the next seven years, in line with its projected production increase. See the math behind this dynamic DCF scenario.

If falling lithium prices put pressure on LTHM's growth and margins, the stock could have significant downside. If NOPAT margins fall to 2016 levels of 19% and revenue grows by just 10% compounded annually for the next 10 years, the stock is worth just \$13.50/share today, a 30% downside from the midpoint of the IPO. See the math behind this dynamic DCF scenario.

Investors view LTHM as a bet on electric vehicles, but really, it's a bet on lithium prices. Higher lithium prices will be bad for EV producers but great for LTHM.

² Same as Figure 1, LTHM's TTM ROIC and Invested Capital are estimated due to lack of information in the company's S-1



Critical Details Found in Financial Filings by Our [Robo-Analyst Technology](#)

As investors [focus more](#) on fundamental research, research automation technology is needed to analyze all the critical financial [details in financial filings](#). Below are specifics on the adjustments³ we make based on Robo-Analyst⁴ findings in Livent's S-1:

Income Statement: we made \$47 million of adjustments, with a net effect of removing \$41 million in non-operating expense (12% of revenue). You can see all the adjustments made to LTHM's income statement [here](#).

Balance Sheet: we made \$83 million of adjustments to calculate invested capital with a net increase of \$53 million. The most notable adjustment was \$46 million in [accumulated other comprehensive loss](#). This adjustment represented 11% of reported net assets. You can see all the adjustments made to LTHM's balance sheet [here](#).

Valuation: we made \$12 million of adjustments with a net effect of decreasing shareholder value by \$12 million. The largest adjustment to shareholder value was \$6 million in [off-balance sheet debt](#). This hidden liability represents less than 1% of LTHM's proposed market cap.

This article originally published on [October 10, 2018](#).

Disclosure: David Trainer, Kyle Guske II, and Sam McBride receive no compensation to write about any specific stock, style, or theme.

Follow us on [Twitter](#), [Facebook](#), [LinkedIn](#), and [StockTwits](#) for real-time alerts on all our research.

³ Ernst & Young's recent white paper "[Getting ROIC Right](#)" demonstrates the link between an accurate calculation of ROIC and shareholder value.

⁴ Harvard Business School Features the powerful impact of research automation in the case study [New Constructs: Disrupting Fundamental Analysis with Robo-Analysts](#).



New Constructs® - Research to Fulfill the Fiduciary Duty of Care

Ratings & screeners on 3000 stocks, 450 ETFs and 7000 mutual funds help you make prudent investment decisions.

New Constructs leverages the latest in machine learning to analyze structured and unstructured financial data with unrivaled speed and accuracy. The firm's forensic accounting experts work alongside engineers to develop proprietary NLP libraries and financial models. Our investment ratings are based on the best fundamental data in the business for stocks, ETFs and mutual funds. Clients include many of the top hedge funds, mutual funds and wealth management firms. David Trainer, the firm's CEO, is regularly featured in the media as a thought leader on the fiduciary duty of care, earnings quality, valuation and investment strategy.

To fulfill the Duty of Care, research should be:

1. **Comprehensive** - All relevant publicly-available (e.g. 10-Ks and 10-Qs) information has been diligently reviewed, including footnotes and the management discussion & analysis (MD&A).
2. **Un-conflicted** - Clients deserve unbiased research.
3. **Transparent** - Advisors should be able to show how the analysis was performed and the data behind it.
4. **Relevant** - Empirical evidence must provide [tangible, quantifiable correlation](#) to stock, ETF or mutual fund performance.

Value Investing 2.0: Diligence Matters: Technology is Key to Value Investing With Scale

Accounting data is only the beginning of fundamental research. It must be translated into economic earnings to truly understand profitability and valuation. This translation requires deep analysis of footnotes and the MD&A, a process that our [robo-analyst technology](#) empowers us to perform for thousands of stocks, ETFs and mutual funds.



DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, "New Constructs") is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first 15 days after New Constructs issues a report on that security.

DISCLAIMERS

The information and opinions presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or solicitation of an offer to buy or sell securities or other financial instruments. New Constructs has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor and nothing in this report constitutes investment, legal, accounting or tax advice. This report includes general information that does not take into account your individual circumstance, financial situation or needs, nor does it represent a personal recommendation to you. 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 any such investments or investment services.

Information and opinions presented in this report have been obtained or derived from sources believed by New Constructs to be reliable, but New Constructs makes no representation as to their accuracy, authority, usefulness, reliability, timeliness or completeness. New Constructs accepts no liability for loss arising from the use of the information presented in this report, and New Constructs makes no warranty as to results that may be obtained from the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information and opinions contained in this report reflect a judgment at its original date of publication by New Constructs and are subject to change without notice. New Constructs may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and New Constructs is under no obligation to insure that such other reports are brought to the attention of any recipient of this report.

New Constructs' reports are intended for distribution to its professional and institutional investor customers. Recipients who are not professionals or institutional investor customers of New Constructs should seek the advice of their independent financial advisor prior to making any investment decision or for any necessary explanation of its contents.

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 jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would be subject New Constructs to any registration or licensing requirement within such jurisdiction.

This report may provide the addresses of websites. Except to the extent to which the report refers to New Constructs own website material, New Constructs has not reviewed the linked site and takes no responsibility for the content therein. Such address or hyperlink (including addresses or hyperlinks to New Constructs own website material) is provided solely for your convenience and the information and content of the linked site do not in any way form part of this report. Accessing such websites or following such hyperlink through this report shall be at your own risk.

All material in this report is the property of, and under copyright, of New Constructs. None of the contents, nor any copy of it, may be altered in any way, copied, or distributed or transmitted to any other party without the prior express written consent of New Constructs. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of New Constructs. Copyright New Constructs, LLC 2003 through the present date. All rights reserved.