SAILINGSTONE

SHALE 2.0

HAPPY FIVE-YEAR ANNIVERSARY

SAILINGSTONE
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A Pickering Energy Partners Company

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"Do the right thing. It will gratify some people and astonish the rest."

Mark Twain

"There are risks and costs to action. But, they are far less than the long range risks of comfortable inaction."

John F. Kennedy

"Someone's sitting in the shade today because someone planted a tree a long time ago."

Warren Buffett

BACKGROUND

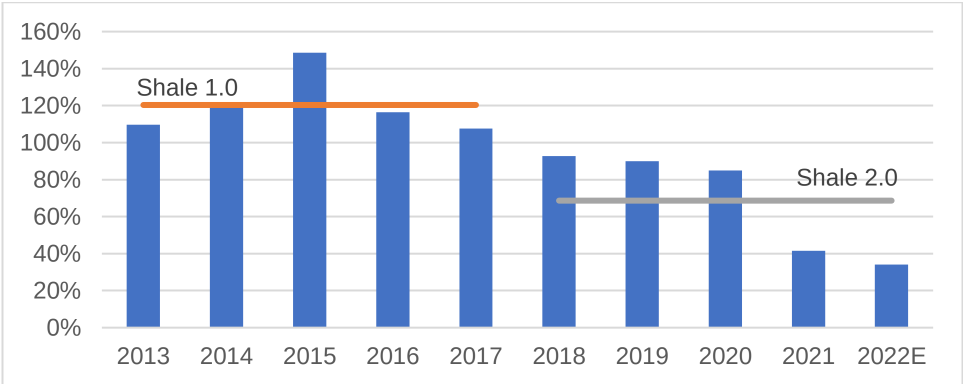
In August 2017, five years ago, SailingStone Capital Partners published its first open letter to the U.S. oil and gas industry highlighting the potential benefits of a fundamental shift in their business models, which we, and others in the industry, referred to as "Shale 2.0."

In that note, titled "Shale 2.0 – The Promised Land?", we argued that changes in the capital allocation processes and incentive compensation practices of oil and gas companies, which emphasize returns on capital and the return *of* capital over production growth, would benefit all stakeholders. In that letter, we wrote:

> *To the extent that "Shale 2.0" translates into more sustainable growth, higher returns on capital, and the return of cash to shareholders, it should be quite positive for both management teams and investors.*

Today, financial discipline is almost religion in the sector. However, it is easy to forget that the idea that E&P companies should generate free cash flow and return capital to owners was a radical one five years ago. Most investors did not believe that such a change would ever happen (even today, many investors are still skeptical that it will continue). And for good reason. For years, most companies in the industry relied on the capital markets to fund capital spending that, on average, exceeded internally generated cash flow by 1.2-1.3x.

Figure 1: Historical Reinvestment Rates



Source: FactSet, SailingStone Capital Partners

As a result of the shale era spending binge, and the availability of the cheap capital that enabled it, debt levels for most shale companies were way too high, decline rates were unnecessarily steep, and dividends/share buybacks were virtually nonexistent. In fact, spending within cash flow was viewed as a sign of weakness, a tacit "admission", if you will, that a company did not have good drilling inventory.

It is always darkest before dawn.

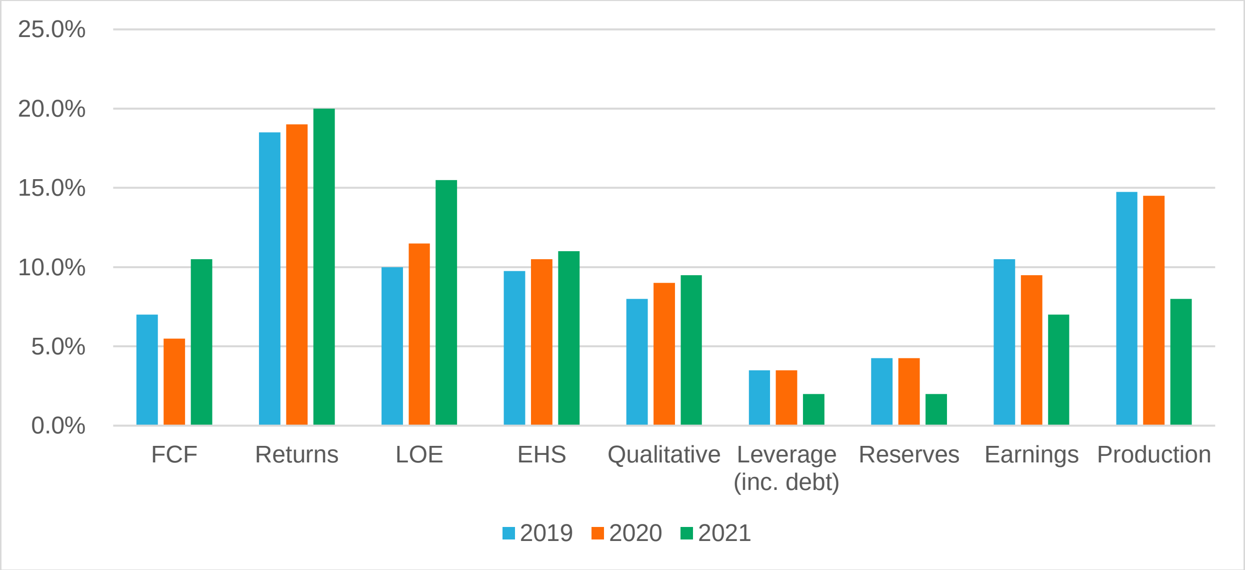
FIVE YEARS LATER

It seems appropriate to review just how much has changed in the sector since the "Shale 2.0" concept was introduced five years ago.

One of the more important changes has been the gradual (and, at times, painfully slow) shift in management incentive compensation programs. For far too long, company boards, which generally lacked independence and did not hold management teams accountable for destroying shareholder value, provided incentives for management teams that were primarily tied to production growth, including unprofitable growth, and total shareholder returns (TSR) relative to their poorly performing peers. And for years, management teams were paid large bonuses for destroying less value than their peers (and some were even paid bonuses to oversee the bankruptcy processes of their companies).

Due to growing shareholder pressure, oil and gas boards have reduced the importance of production growth targets and increased the use of return-oriented metrics and free cash flow in their incentive compensation plans. The chart below shows how management incentives have changed over the last few years in the E&P industry.

Figure 2: Average Industry Weighting by Compensation Metric



Source: Morgan Stanley

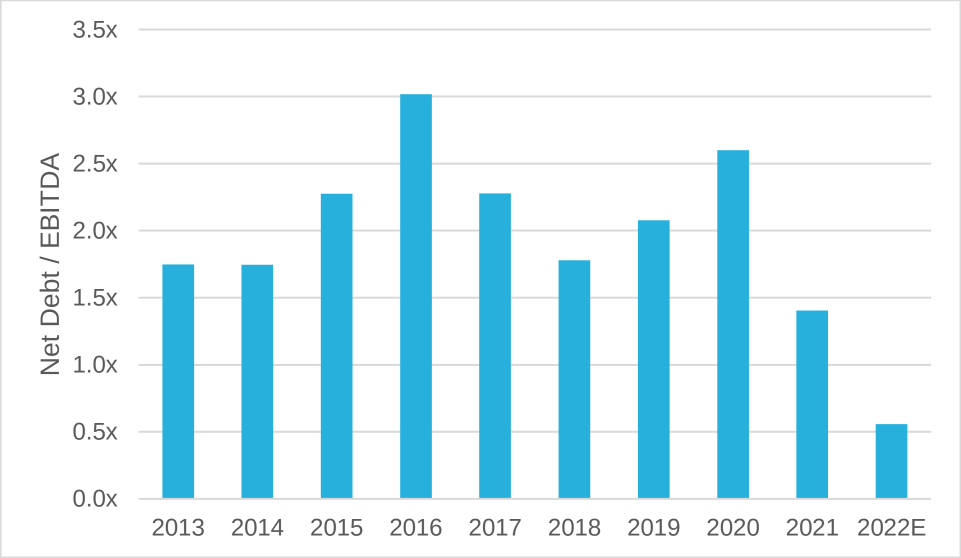
Although relative TSR continues to be used too much, many companies have created absolute return thresholds, limiting how much management teams can get paid if absolute TSR is negative. So, while more improvement is needed, the changes that have occurred are an important step in the right direction.

As a result of the near-death experience for many companies in 2020, the changes in incentive compensation plans, and the subsequent lack of access to capital, E&P companies have aggressively reduced indebtedness over the last five years.

We have argued for a long time that the capital-intensive nature of the E&P business, with corporate decline rates of 20-50%, depending on the company, and the cyclicality associated with commodity price cycles make financial leverage especially dangerous in the oil and gas industry (we disagree with the overly theoretical concept of WACC and the idea that companies can be "underlevered"). It appears that management teams and directors finally got the memo.

Over the last five years, leverage ratios have declined materially. This has been the result of both reductions in overall indebtedness and improved cash flows. The lower debt levels should improve profitability throughout the cycle and reduce downside risk for shareholders during periods of cyclical weakness – resulting in less severe drawdowns during downcycles.

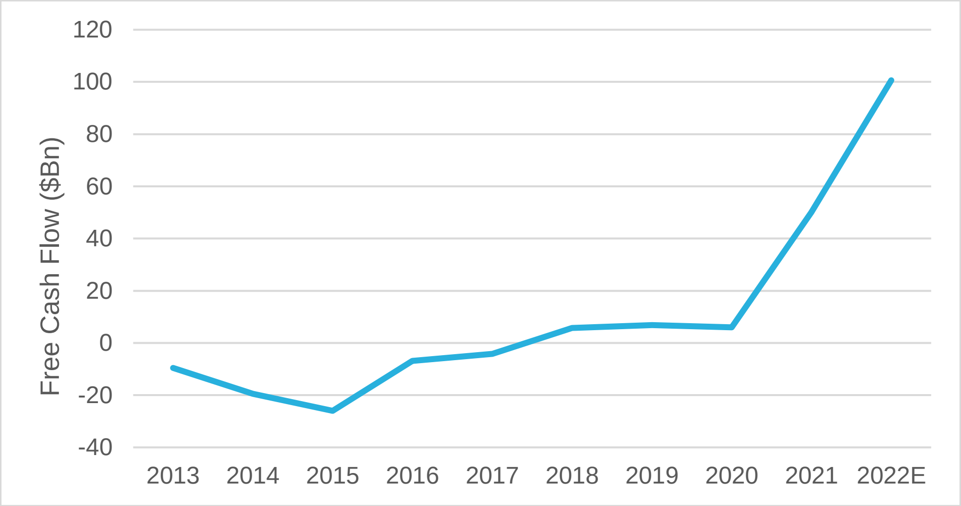
Figure 3: Industry Leverage Metrics



Source: FactSet, SailingStone Capital Partners

With lower interest payments, lower corporate decline rates, and less capital spending on growth (particularly unprofitable growth), all companies in the industry are now generating significant levels of free cash flow, up from less than 10% of companies in 2015. In fact, it is estimated that the industry will generate more than $100B in free cash flow this year alone.

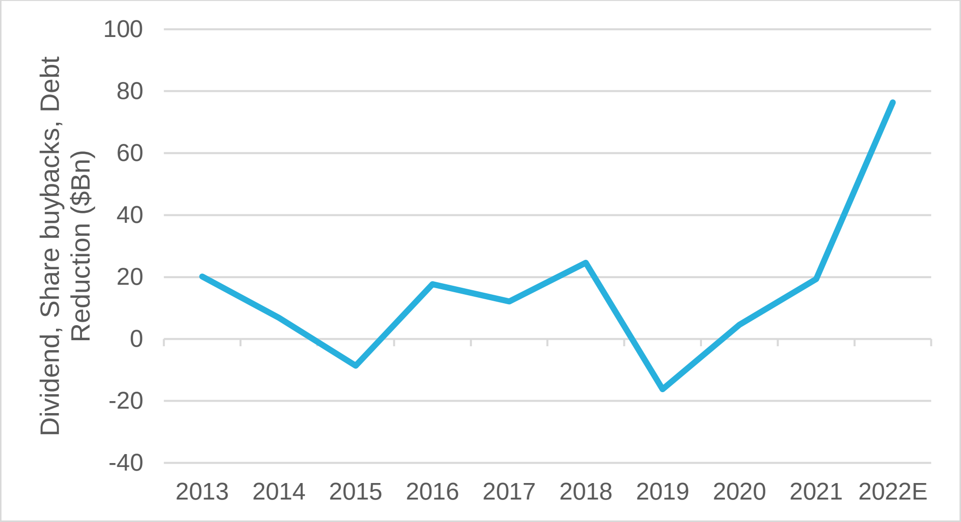
Figure 4: Industry Free Cash Flow



Source: FactSet, SailingStone Capital Partners

As free cash flows have increased and as debt levels have continued to decline, E&P companies have begun returning excess capital to shareholders through dividends, share buybacks, and continued debt reduction. This marks an incredible change in just five years.

Figure 5: Industry Cash Returned to Shareholders



Source: FactSet, SailingStone Capital Partners

Not surprisingly, the result has been a significant improvement in total shareholder returns. Since our original note, the total shareholder return for the E&P sector has been a positive 20% despite the significant commodity price downturn in 2018-20. Since the end of 2019, when most companies in the industry finally ditched the old business model, total shareholder returns for the sector have been above 60%, meaningfully outpacing the S&P 500 over the same period.

Figure 6: TSR for E&P Industry

Source: Bloomberg, SailingStone Capital Partners

In short, Shale 2.0 has been an astounding success for both shareholders and management teams, as we expected when we wrote our first open letter five years ago. Given the dramatic improvement in company fundamentals and shareholder returns, management teams and investors would be smart to continue to rely on this proven business model, particularly now that the interests of shareholders and management teams finally are aligned.

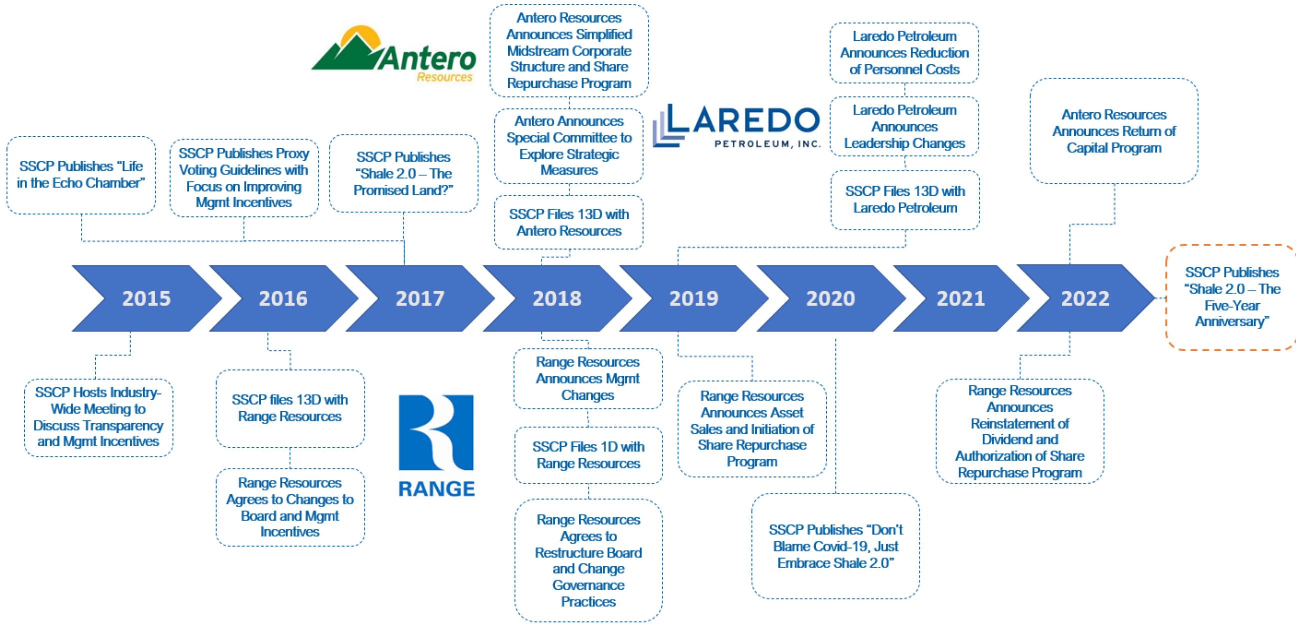
ESG BEGINS WITH ENGAGEMENT

Importantly, the significant changes that have occurred in the sector over the last five years were not the result of a few open letters. Rather, the improved governance practices and financial discipline were driven by shareholder engagements and the growing recognition that the old business model was not sustainable, if for no other reason than the fact that the capital markets were closed to oil and gas companies.

SailingStone wasn't the only engaged shareholder, but the list of engaged owners in the E&P industry can be counted on less than one hand.

The engagements that have helped to transform the sector included meetings with industry leaders, calls with independent directors and proxy consultants, shareholder votes against incentive compensation plans and directors, open letters, and activist campaigns. The timeline below summarizes our engagements in the industry since 2015.

Figure 7: SSCP Engagement Timeline



Source: Company Reports, SailingStone Capital Partners

Our focus on Shale 2.0 wasn't about changing a metric or two – it was about the adoption of a business model that ensured the sustainability of the industry. While many investors seem to believe that ESG is a new obstacle for E&P companies, we believe it is simply an extension of the Shale 2.0 mindset. Much like the proxy voting process which enabled Shale 1.0 to become an entrenched business model, too many investors are abdicating their role in determining ESG policies by outsourcing the evaluation of ESG practices to firms that use formulaic, arbitrary, and often misleading metrics. ESG should be an active and ongoing process between company boards and long-term shareholders – not a marketing strategy or black box. Real companies have relevant, measurable ESG targets and policies that strengthen their business and help to protect their social license to operate. In much the same way that the initial adoption of Shale 2.0 led to a radical reduction in the cost of capital for the E&P industry, we expect a pragmatic approach to ESG will improve the sustainability of successful companies for decades into the future. Call it Shale 2.1.

STAY THIRSTY, MY FRIENDS

In capital intensive businesses, the fruits of engagement are measured in years, not months. Engagement today will impact results over the next 5-10 years, not the next few quarters. When we take a step back to review our engagements over the last decade, we are proud of our work and the impact that we have had on our portfolio companies, their governance practices, and the outlook for future returns.

While SailingStone will continue to be an engaged owner, focused on our dual mandate of generating attractive returns while minimizing any environmental impact, our hope is that the engagements will be less contentious than they were five years ago when the Shale 2.0 concept was less proven and concerns regarding emissions were less pressing.

While much has changed since our initial open letter, it is way too early to declare victory. As we write, some companies, including many private oil and gas companies, are beginning to accelerate activity (in higher-cost basins) into an environment that is likely to see much lower drilling returns due to rising service costs, lower commodity prices, and inventory degradation as we move forward.

Most generalist investors still question how long financial discipline will last. This skepticism is reflected in public equity valuations, with many companies still trading below the value of their proved reserves at relatively modest commodity price assumptions. With depressed valuations, share buybacks make much more sense from a return perspective than drilling more wells.

This is an important point in time for the sector.

Discipline will be measured over many years and many generalist investors are looking for signs that the Shale 2.0 business model will be abandoned when the capital markets are open again. E&P companies need to maintain their discipline, codified by incentive compensation plans that prioritize returns over production growth, and investors need to continue to engage with management teams and boards by emphasizing the proven success of the Shale 2.0 business model.

For our part, SailingStone will remain committed to engaging with portfolio companies, as we have done over the last decade, to ensure that management teams continue to focus on generating attractive through-cycle returns while helping drive meaningful changes to corporate ESG practices. Fortunately, most publicly traded companies appear committed to staying the course given the significant improvement in shareholder returns and company fundamentals over the last five years. The slide below from Range Resources is a great example of the unwavering commitment to Shale 2.0 being exhibited by many companies in the industry.

Figure 8: Range at a Glance

Focus on Free Cash Flow

- Peer-leading well costs and base decline rate drive low sustaining capital requirements
- Competitive cost structure and marketing strategies support expanding cash margins
- Multi-decade core inventory life provides long runway of free cash flow generation
- Returning capital to shareholders via dividend and $500 million share repurchase program

Unmatched Appalachian Inventory

- Approximately one-half million net acres provide decades of low-risk drilling inventory
- Contiguous position allows for efficient operations and long-lateral development
- YE2021 Proved Reserves of 17.8 Tcfe – PV-10 of >$60 per share, net of debt[(a)]

Upstream Leader on Environmental Practices and Safety

- Targeting net zero GHG (Scope 1 & 2) emissions by 2025
- Reduced environmental impact and enhanced profitability through:
  - Emissions monitoring and responsibly sourced natural gas (RSG) certification projects
  - Water recycling and logistics
  - Long-lateral development and innovative facility designs
  - Electric-powered fracturing fleet
  - Robust Leak Detection and Remediation (LDAR) program

Management Incentives Aligned to Support Free Cash Flow, Corporate Returns, Balance Sheet Strength & Environmental Leadership

Source: Range Resources

For the most part, we expect this discipline to continue.

So, on the Five-Year Anniversary of Shale 2.0, we raise a glass of low-end sparkling wine (since we haven’t made that much money yet) to celebrate the changes that have occurred and to toast what the next five years will bring for investors who remain engaged and for E&P companies that remain committed to the Shale 2.0 business model.

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