Emergency Readiness as Social Value: How World Class Response Teams are Meeting the Challenge of ESG

There's a saying that a crisis rarely creates dramatic change, it simply accelerates change that was already under way. So far, 2020 has turbocharged several major trends in the Refining and Petrochemical industry thanks to the simultaneous demand destruction of COVID-19 and the oil price war. By destabilizing the fundamental economics of the industry, these events accelerated a downward trend in capital expenditures that was already taking place due to the rise of Environmental, Social, and Governance (ESG) investing.

What is ESG Investing?

Put very briefly, **ESG** is a form of socially responsible investing that evaluates investment in a company based upon the company's **environmental** (E) and **social** impact (S) as well as the quality of its **governance** structure (G). Since 2016, investment in ESG funds has grown by 38% to nearly $12 trillion[1] as the growing ranks of socially conscious investors look to place their money in stocks that will make them money while matching their values.

Logically, refining and petrochemical firms struggle to rank high for this large pool of capital mainly because of their environmental footprint. Even so, fund managers will invest in these firms as an asset class but they will favor the ones with the best ESG scorecard. It's like that old adage about walking in the woods with a friend and meeting a grizzly bear: To survive, you don't have to outrun the bear, you just have to outrun your friend.

We've seen this manifested in oil majors declaring their goal of carbon neutrality in the future, a concept that would have been unthinkable only a few years ago. Whether you view this as "green washing" or a forthright effort to respond to environmental concerns, it is a force that is dramatically affecting our marketplace, which relies heavily on capital investment to remain competitive and safe.

The progressive reduction in capital expenditures by companies in this sector is related to this phenomenon. Even before the shocks of 2020, the trend was obvious: In 2019, the five largest integrated oil and gas companies—**ExxonMobil, Shell, Chevron, Total, and BP**—spent a total of $88.7 billion on capital projects, **down nearly 50 percent** from the $165.9 billion they spent in 2013.[2] Capital investment is a leading indicator of an industry's long term outlook so declining capex signals an industry that views itself in decline.

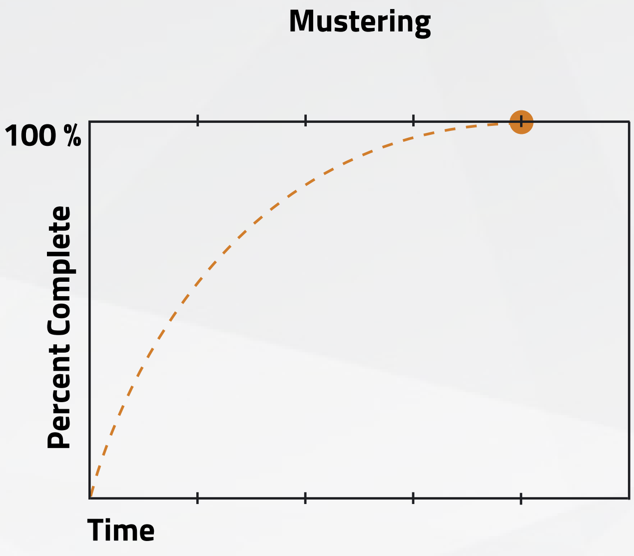
Accentuate the Positive

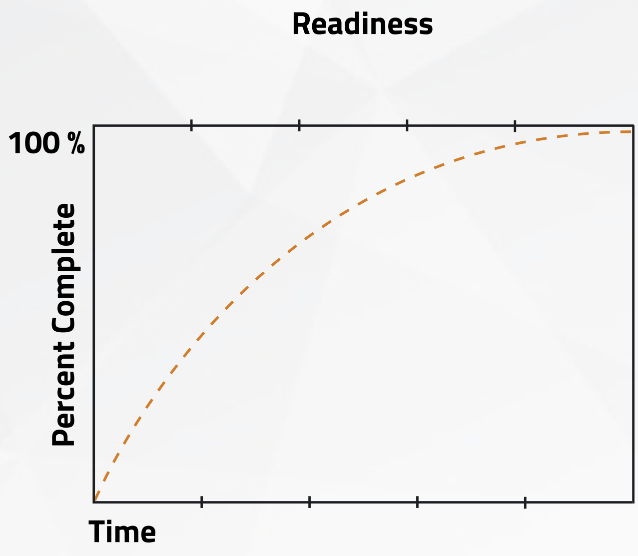
It stands to reason that fossil fuel-based enterprises like refiners and petrochemical manufacturers face an uphill battle in competing for a slice of the growing ESG capital resource. This is, of course, due to the legacy attributes of the "E" in ESG and explains why companies with trillions in fossil fuel based assets are declaring their goal of carbon neutrality and even exits from fossil fuels in the next 30 years. These same companies are relatively strong in "G" (governance) with extensive ethical guidelines, high quality board members, and well-resourced legal support.

They also have the potential to make a strong showing in "S" (social impact). Many are doing well in this area by activating their employees to serve in their communities and raising substantial funds for social causes. That said, there is substantial improvement that is yet to be enabled by the digital transformation of Safety and Emergency Response to protect those same employees. This aspect of most enterprises has lagged the rest of the business in pursuing digital transformation and much of it remains a collection of mostly analog processes. To illustrate the point, let's focus on the concept of Emergency Readiness.

Emergency Readiness is the measure of an organization's ability to respond to an emergency. At its core, it is a continuous improvement process driven by experience and practice. Since it is theoretically impossible to be ready for everything, readiness is a metric that will never reach 100%. This stands in contrast to readiness sub-processes like mustering which contribute to readiness but can reach 100% because you can locate all of your people if you give yourself enough time. The plots below show the difference:

Emergency Readiness





Some might say that the impossibility of reaching 100% makes the readiness journey futile but that argument is off target. The very nature of its impossibility creates the opportunity to engage an enterprise's most important stakeholders - its employees - in a collaborative journey to achieve a valuable social impact: No harm to people. This concept is not new but it takes on greater importance with the rise of social consciousness in the generations that are growing their ranks in the staffs of refiners and petrochemical producers. Past efforts in this area by some companies have been labeled "green-washing" - half-hearted efforts for the sake of PR, not real change - but the rise of mature ESG metrics and scrutiny make it an imperative to compete for investment in the public markets.

This makes it not only the right thing to do, but makes doing so in a measurable, sustained way a competitive advantage in the sector. Fund managers are recording metrics and investing based upon how companies treat their employees and have already catalogued the easy ones like lost workday cases and total recordable injuries. They're beginning to see what world class operators have known for a long time: These metrics are leading indicators for future performance. In a very compelling example outside of safety, an ESG fund downgraded a major credit reporting agency to its lowest rating and exited the stock because of its performance in data security. A year later it suffered one of the largest data breaches in history, which resulted in dramatic penalties and lost market cap.[3]

Readiness Via Digital Transformation

If companies want to compete for a slice of the ESG pie, they must be able to document their performance in the categories that are valued by the investors.

ESG funds must battle against claims of lip service and false narratives (green washing) so they are becoming more demanding about data to add credibility to their strategies. So, companies that can generate data to prove, for example, Social Value, set themselves apart from companies that can't.

Conversely, when a category of data is missing from companies' ESG scorecards, analysts question why and assume the negative.[4]

The prerequisite to providing data is the ability to capture, analyze, and interpret it. This is a major challenge with analog processes, so implementing a digital transformation strategy is one of the first steps to getting in the ESG game. Since most emergency response organizations lag in digital adoption, there is a great opportunity for companies to set themselves apart by embarking on the digital transformation of this critical function. These same companies will achieve better results by taking a holistic view of the many activities that comprise emergency response under the umbrella of the metric of Readiness. As a metric, this is a relatively new category that measures each organizations' commitment to emergency response. Examples of this metric may include components like:

- Emergency Response Staff training
- Emergency Response Staffing levels
- Response metrics (speed, accuracy, completeness, etc.)
- Equipment and supply readiness
- Contractor performance

In total, the *Readiness* metric is a means to measure and prove the organization's ability to protect its people, and the *Readiness Over Time* metric is the means to prove a company's commitment to continuous improvement in Readiness. This could also be described as *Readiness as Social Value* because it maps directly to the company's ongoing commitment to Valuing People. As the level of scrutiny of what goes on inside the enterprise grows, Readiness is a useful and powerful means for a company to demonstrate its commitment to the wellbeing of its employees.

Readiness as Social Value

Readiness

Continuous Improvement

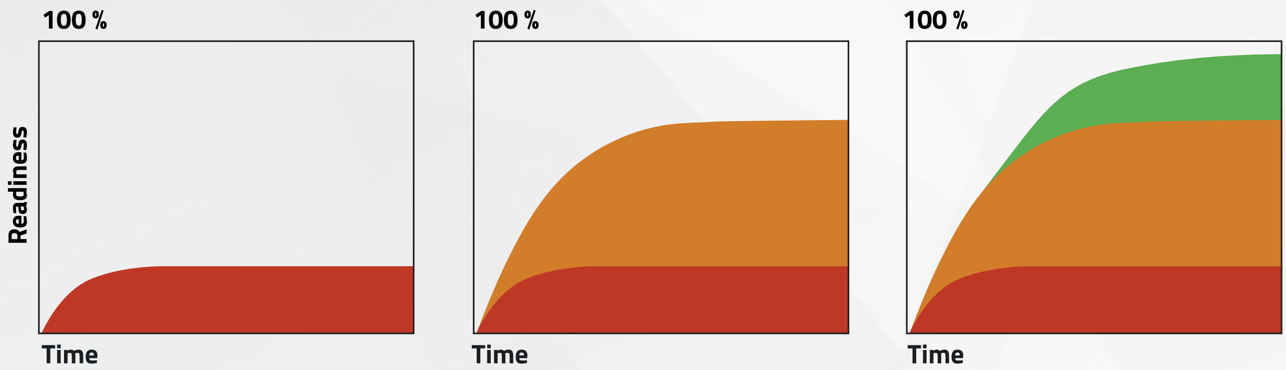
Valuing Employees

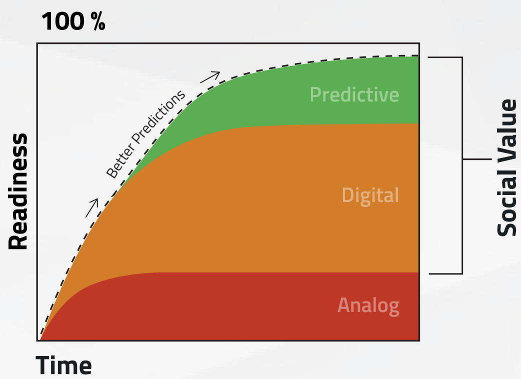
Turn Readiness into Social Value

Creating a meaningful Readiness metric requires the company to integrate the context of the workplace with the component metrics that truly reflect the state of readiness. With a baseline of analog processes, companies can achieve dramatic improvements in Readiness by implementing technology that enables them to capture, analyze, and interpret data. (An important caveat is in order here: A successful digital transformation is one that follows a pace that fits the culture and organization. Going too fast can disable a site's Readiness.) This improves Readiness in an absolute sense because prudent technology enablement fundamentally equips emergency response teams better than the baseline analog tools. At its most fundamental level, this is true because it begins the process of capturing data and learning from it. As the pace of improvements flatten, much as a Learning Curve does, the next level of Readiness is achieved by using the data to power AI and predictive analytics so that the organization can be proactive in addressing issues before they manifest.

Let's look at this graphically:
The curves depict the Readiness metric and the area under the curve is the Readiness Over Time.

Analog provides low state of Readiness...	**Digital Transformation dramatically improves Readiness but ultimately flattens...**	**Predictive Analytics approaches 100% Readiness**





Analog **Digital** **Predictive**

If we view these curves together, we can see the contrast in Readiness Over Time (**Readiness as Social Value**) between the leaders and the laggards.

The data emerging from socially conscious investing is that the ESG metrics are valid predictors of long term company performance. Strength in these factors creates a virtuous cycle by helping companies to compete for capital and provide better returns on that capital by driving their ESG metrics. For example, safer companies are more profitable companies in the long run because they typically value their people more which goes hand in hand with morale. Back to the ESG scorecard, the **"S"** in ESG places an emphasis on employee morale as a leading indicator of a company's long term **success**.

The opportunity to be a standout in Readiness is ripe in Petrochemicals, Refining, Critical Infrastructure, and other High Hazard facilities because most emergency response organizations lag in technology adoption. For example, almost two thirds of all the plants in North America still use analog processes to manage their incidents which makes them less agile in the moment and leaves them without any usable data to analyze as a basis for improvement. In addition, the timing is fortuitous with the rise of Technology as a Service (TaaS) offerings, which bring the technology acquisition costs down, and out of the capital budget. Companies that lead the pack in Readiness will outperform their peers in both attracting investment capital and delivering value in the long run.

Put it into Practice

Technology to enable Readiness is rapidly evolving as emergency response teams and technology providers take a more holistic view of the requirements. High-hazard industries have a high threshold to achieve fitness for use due to the unique processes and demanding environment. Emergency response readiness platforms exist that can enable long term progress and sustained value because the manufacturer has a focus on, and robust dialog with, high hazard users.

For example, at inFRONT, we methodically enhance AllClear with the consistent input of emergency responders, HSE managers, security professionals, and corporate IT specialists who work in the Critical Infrastructure. In parallel, we engage with senior leadership who hold the responsibility of setting the strategic course for the company. This serves to connect the "boots on the ground" to the corporate suite in driving the "S" in ESG. As a result, each new feature is built with specific and common use cases that assure the correct direction of the product roadmap.

By maintaining a product roadmap that is on point for these specific use cases, companies can adopt in logical steps with the confidence that solving one problem will not preclude them from adapting or extending to address the next challenge. This is the best approach to solving the Readiness challenge and thereby support the enterprise's goals for social impact through valuing people.

[1] https://www.ussif.org/files/US%20SIF%20Trends%20Report%202018%20Release.pdf
[2] Institute for Energy Economics and Financial Analysis 2/2020
[3] https://www.cnbc.com/2020/06/25/what-is-esg-and-socially-responsible-investing.html
[4] https://www.cnbc.com/2020/06/25/what-is-esg-and-socially-responsible-investing.html

Is your Emergency Response process aligned with your company's mission to create Social Value?

Contact us today to solidify your ESG journey with **AllClear by inFRONT**.

800.256.2003
info@infrontusa.com
infrontusa.com