



Extracting with Purpose

Creating Shared Value in the Oil and Gas
and Mining Sectors' Companies and Communities

FOREWORD BY MICHAEL E. PORTER



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Foreword:

BY PROFESSOR MICHAEL E. PORTER

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Extractives companies are a major source of income and economic growth. Oil and gas and mining operators, suppliers, and related supporting industries represent an estimated five percent of global gross domestic product. Three of the world's ten largest companies are extractives companies. Although companies in this sector have had a decidedly mixed record on social and environmental issues, they have helped create more vibrant economic development, new businesses, new jobs and opportunities for professional growth, reductions in the disease burden, and more effective government. Close to four million people are employed by mining companies alone.

While the mining and oil and gas sectors differ in terms of their products and to some extent operations, their upstream activities – the focus of this report – face similar on-the-ground realities. Reserves are often found in remote areas with limited economic activity and major societal needs. Operations require massive inflows of capital that often dwarf local economies. Both sectors have a long-term horizon, with reserves depleted over several decades. Companies and suppliers inevitably have multiple points of interaction with local communities.

Yet the huge economic output of the extractives sectors, valued at \$3.5 trillion in 2012, has not always translated into improved social and environmental outcomes for the countries and communities where these companies operate. Among nations that depend most heavily on minerals and fuels, only two rank among the top 50 countries globally in the United Nations Development Program's Human Development Index (HDI). Nigeria is emblematic of this missed opportunity. Despite the

presence of major oil companies in Nigeria since the early 20th century, the country still ranks among the bottom 20 percent of countries in the HDI and its GDP per capita was 180th in the world in 2013.*

Extractives companies today are losing billions to community strife despite extensive community relations programs. In Nigeria, community disruptions to pipelines lowered oil production by 18 percent between 2005 and 2008. Strikes at platinum mines in South Africa in 2012 caused production to drop by 12 percent of the total annual global supply. New data from the International Council on Mining and Metals shows that reported conflicts with communities are increasing.

Companies have large community relations groups and sophisticated manuals for stakeholder engagement and impact mitigation. Yet the norm is to respond to conflicts by focusing on the visible causes of tension – protests, permit delays, negative media coverage, and demands from local influencers – so-called non-technical risk. Companies spend hundreds of millions on social

* On a purchasing power parity basis.

investment projects even though research shows little correlation between the amount of money spent and the success of company-community relations. Investments based on community wish lists and attempts to placate the loudest voices in a community have led to ever-shifting community requests, unilateral projects that have little impact, prioritizing image over outcomes, and missed opportunities for business and community alignment. Companies track dollars disbursed rather than societal outcomes. A “non-technical risk management approach,” the prevailing one in this field, is not an effective long-term community engagement strategy, nor does it deliver meaningful societal outcomes.

Aligning the business interests of extractives companies with community needs and priorities is the only real solution for companies and communities alike. The root causes of community strife are lack of economic opportunity, poor health, lack of effective local or national governments, and environmental degradation. These issues are fundamental to business success due in part to the very long time horizons of oil and gas and mining operations and the deficits in the regions where these companies operate. Companies must tie community prosperity to the present long-term needs of the business in areas such as a qualified labor pool, capable suppliers, and well-functioning community infrastructure.

This report offers a vision for extractives companies to approach communities based on **shared value**. Since the release of the article “Creating Shared Value” in *Harvard Business Review* in January 2011, companies in many industries are moving away from old mindsets that view social problems purely as risks. Few sectors have a more urgent need to recast a short-term community risk mindset into a shared value model. Maintaining the *status quo* is no longer an option as protests and disruptions mount, companies move into ever more remote locations, and governments seek partners with a shared value mindset with which to develop resources.

This report reviews the success of existing practices and describes why shared value is an imperative for extractives companies. It offers a blueprint for shared value in the sectors and ways that governments, local and international NGOs, and industry associations can accelerate long-term social outcome improvements

in the locations where resources are extracted. Some companies are already moving in this direction, and their examples are shared in this report. Obstacles to shared value, such as the legacy organizational structures and prevailing cultures in extractives companies, are described, as are ways to tackle them.

This study also enriches the concept of shared value. Although the end products are commodities and depleting natural resources and depending on fossil fuels are not sustainable strategies, extractives firms have clear shared value opportunities in the value chain through strengthening the workforce and improving the utilization of water, energy, and other resources in operations. Also, while their end products are commodities with limited local needs, extractives companies also produce intermediate products of extraction, such as drinking or irrigation water and electricity, that can be provided to the local community and can create enormous shared value, especially in remote regions.

A “non-technical risk management approach,” the prevailing one in this field, is not an effective long-term community engagement strategy, nor does it deliver meaningful societal outcomes.

We find extractives companies moving to create shared value in two different ways. One is initiatives directly related to the companies’ businesses. BP’s enterprise development program, featured in the report, is a good example. However, we also see companies, in collaboration with others, playing critical roles in broad-based economic and community development. Many of the shared value investments relevant for extractives are more indirect and longer-term than in other sectors we have examined, and reflect the remote regions and very long time horizons of investments in these fields. Chevron’s Foundation for Partnership Initiatives in the Niger Delta is emblematic. The way in which leading extractives companies have approached these broadly

based investments carries important lessons for other sectors such as agriculture and telecommunications that are seeking to compete in frontier economies.

Aligning the business interests of extractives companies with community needs and priorities is the only real solution for companies and communities alike.

This report points the way toward a better future. Shared value cannot substitute for shoddy operational performance, environmental damage, or poor ethics, but it offers a shift in purpose for these companies in the places where the resources are extracted. When extractive companies take a shared value perspective, they are producing more than just oil, gas or minerals. They produce new businesses, more vibrant economic development, new opportunities for professional growth, reductions in the disease burden, and more effective government to facilitate the long-term development of the community in which the company operates.

It is becoming clear that some extractives companies are now recognizing that shared value is the next competitive advantage. Technical skills in project planning, exploration, and production are becoming table stakes. Companies that can develop unique strategies in creating shared value will become the partners of choice in the extractives sectors. We see a world in which competition in extractives will be increasingly determined by the ability to integrate economic and social factors.

This report is one of a series of studies examining shared value opportunities in particular sectors. The aim is to deepen the understanding of shared value for companies as well as their partners, including government, nongovernmental organizations, and other stakeholders. We hope this report will inform and trigger a new era of societal impact by the extractives sectors, and offer new perspectives for government and community organizations that will amplify their impact.

Executive Summary

The Case for Shared Value

This report highlights how companies in the oil and gas as well as mining and minerals fields can create shared value by pursuing opportunities that tie business success to the prosperity of host communities and countries, often working in collaboration with governments, multilateral institutions, nonprofit organizations, and even competitors. While the sectors' downstreamⁱ products and services create tremendous benefits for society, this report focuses on the upstream – the activities related to extraction – area of the business. This is an important area to investigate due to the magnitude of the opportunities for both business and society and the history of adversarial relationships that exists among companies, host communities and countries, and other stakeholders. For extractives companies, addressing this dynamic and becoming governments' and communities' partner of choice – for extraction and for societal development – will be the next competitive advantage.

Creating shared value in the extractives sectors is not a new concept, but current practices fall short of potential, and few companies have overarching shared value strategies. Even among the more enlightened companies, project execution is inconsistent. Companies need to change the existing mindset that sees projects in local communities only as a cost to the business. Rather, companies can start from the premise that there is real business value in solving societal needs. Otherwise, there is an immense opportunity lost – for both extractives companies and society.

Adopting shared value strategies in the sectors is challenging, and this report acknowledges several reasons for that. Change will take time and require stakeholders to reimagine how companies can generate value beyond what they extract. But the opportunity to raise millions out of poverty around the world while overcoming one of the biggest barriers to companies' economic success is too great to ignore.

Context

The stakes of strengthening the links between business and societal outcomes are rising. Extractives companies operate in some of the most underdeveloped regions on earth. Nearly 80 percent of countries whose economies depend on extractives operations have per capita income levels below the global average. Many of these nations also face significant challenges in health, education, economic development, and basic infrastructure. The extractives sectors are a critical source for economic and social development in many of these countries. Yet countries and communities have failed to fully capitalize on the societal opportunities created by the presence of oil and gas or mining companies. Among the 25 countries that depend most heavily on mineral and fuel production, only two – Brunei and Qatar – rank among the top-50 countries globally in the United Nations Development Program's Human Development Index.¹ This is critical: for some host countries, there is no path to development that does not involve leveraging the extractives sectors' contributions.

i. There is opportunity to continue to innovate and create shared value throughout the downstream activities of the industry, and many societal needs are associated with downstream products (e.g., access to energy, renewable energy). The focus of this report, however, is on upstream activities – that is, those that take place at or near the point of extraction.

This failure to build human capital creates real business costs, some obvious (e.g., conflicts with local communities that see no benefits from resource extraction) and some subtler (e.g., the added costs of sourcing goods and services from uncompetitive local suppliers, employing an expatriate workforce at a premium due to lack of local talent). The lack of development in poor countries is not the sole responsibility of the sectors. As companies look to expand to more remote and underdeveloped areas, however, finding a way to improve dynamics between companies and host communities and nations has become a business imperative. Doing so is critical to mitigate risks and improve operational efficiency.

AUTHORS' NOTE

Companies covered in the study profit from the extraction of a finite supply of natural resources. Despite the sectors' efforts to minimize their footprint, atmospheric emissions, water consumption, environmental impacts, and energy use are all realities. FSG recognizes that the world's reliance on fossil fuels merits public and political debate and that addressing climate change is one of today's more pressing societal issues. FSG also recognizes that extractive companies have a history of adverse environmental and social impact. This report assumes, however, that until society reaches consensus on how to reduce dependency on fossil fuels and transitions the global economy away from their use, an opportunity exists to improve the societal value of extraction activities in local communities and host nations. As long as the sectors remain, the opportunity to build prosperity is too great to ignore. Through shared value, the extractives sectors have enormous potential to deliver these positive social outcomes by unlocking opportunities for economic and community development at scale. See "The Extractives Sectors and Society" on page 12 for a deeper discussion on this important topic.

Moreover, as technology becomes less of a differentiator among companies in the sectors, demonstrating the ability to address societal issues to host governments and communities will be critical to securing concessions.

Companies operate in extremely complex environments where many decisions involve tradeoffs among competing interests. They understand the importance of relations with host governments and communities. During the last several decades, many have invested in gaining a better understanding of the negative impact of their operations and improving both their and the host governments' abilities to address societal issues. They have invested in social and environmental engagement, developing toolkits, guidance, and processes to help improve societal outcomes, prevent human rights violations, and improve accountability and revenue transparency. They have adopted performance standards on social and environmental issues with the aim of preventing harm in communities and countries with extractives operations.

Despite these investments, the relationship between companies and host nations and communities where companies extract subsoil assets is often transactional, if not adversarial. It typically focuses on what companies spend philanthropically and pay in taxes and revenue sharing in exchange for extracting resources. Companies react to community demands through social investments in attempts to secure company acceptance with little emphasis on delivering or measuring societal outcomes. The amount of money spent often serves as the only measure for all parties to value social investments. As a result, companies find themselves forced to spend more every year on efforts that may or may not improve the communities and countries in which they operate.

Shared value – defined as policies and activities that measurably improve socio-economic outcomes and improve related core business performance (e.g., decreased operational costs, enhanced productivity, and/or a predictable and stable business environment) – establishes a framework for identifying opportunities to address societal issues and deliver real business value.

Some extractives companies are already experimenting with a variety of shared value initiatives along the three levels of shared value. See chart on next page.

The menu of possibilities is substantial, and examples of success in creating shared value initiatives exist.

LEVELS OF SHARED VALUE CREATION FOR EXTRACTIVES COMPANIES

Reconceiving Products and Markets 1	Redefining Productivity in Value Chains 2	Creating an Enabling Local Environment 3
<ul style="list-style-type: none"> → Build local markets for intermediate products created by extractive activity (e.g., drinking or irrigation water, electricity) 	<ul style="list-style-type: none"> → Improve local workforce capabilities → Strengthen suppliers in the value chain → Increase local disaster and emergency preparedness, response, and rehabilitation capabilities → Improve utilization of water, energy, and other resources used in operations 	<ul style="list-style-type: none"> → Develop the local cluster supporting the extractives sectors → Invest in shared infrastructure and logistics networks → Partner with other local clusters and government in building community infrastructure → Play an active role in broad-based economic and community development → Improve local and national governance capacity

Few companies, however, are developing company-wide shared value strategies. Most efforts are one-off projects that emerge serendipitously or through the dedicated efforts of a handful of individuals. Several obstacles are deterring companies from adopting shared value more explicitly as a strategy.

Overcoming the Obstacles to Creating Shared Value

Research for this report uncovered four critical challenges that impede the development of shared value strategies in the extractives sectors. Finding opportunities and implementing shared value strategies consistently hinges on commitment from companies and other stakeholders to overcoming these challenges via:

- **Removing Internal Barriers:** Companies have built-in organizational barriers that prevent shared value creation. These barriers manifest themselves in limited understanding of societal issues across the business and a lack of skills to address these issues, a perceived lack of rigor and measurement in social engagement functions, and incentive structures that do not reward strong performance against societal measures. To counter these barriers, companies can make operational changes, including integrating business and social functions, aligning societal and business reporting processes, and creating incentives for measurable improvements in host communities.
- **Measuring the Opportunity:** Companies do not size shared value opportunities accurately and underestimate the business benefits of shared value. The full upside of the opportunity is not captured, and the full costs of *not* investing in shared value strategies – e.g., paying a premium for local content or employing an expatriate workforce – are not measured. Approaches that capture the full financial impact, including both benefits and costs, of potential interventions can expose their materiality and thus justify more shared value activity.
- **Embracing Collaboration:** Collaboration often is seen as difficult, impractical, time-consuming, and at odds with reputational objectives. But the scale and range of the societal challenges that companies must tackle to create shared value requires collaboration with a wide range of partners – even other extractives companies. Collaboration can make the difference between token actions with little impact and measurable societal change.
- **Aligning with Government:** Local, regional, and national governments can promote shared value effectively, but they often do not. While companies cannot and should not replace government, they can strengthen their own ability to create shared value by helping to build local, regional, and national capacity for effective governance.

Shared Value in the Broader Societal Engagement Agenda

Shared value is not the only way in which companies engage with society, nor should it be. Mitigating the societal impacts of projects, conducting effective community engagement and outreach, complying with – and in many cases going beyond – regulatory requirements, operating sustainably, and making charitable contributions in host communities all play a role in a company’s contributions to society. But shared value can be a powerful, sustainable approach to building societal prosperity and creating value for the business simultaneously.

Recommendations for the Future

The opportunities for shared value creation are as challenging as they are significant. While some companies have already begun to craft shared value strategies, others are still in the exploratory stages. The following recommendations can accelerate progress towards shared value adoption.

Recommendations for Companies

To advance shared value, companies can adopt some of the same practices they use to make business investment decisions concerning projects in host communities and countries. Companies can take a long-term view toward solving societal issues to benefit the business, invest in improving business unit operations’ knowledge of societal issues and vice-versa, measure societal out-

RECOMMENDATIONS FOR COMPANIES

	Recommendations for Action by Extractives Companies	Long-Term Success: Embedded Shared Value
Approach to Societal Issues	<ul style="list-style-type: none"> Take a long-term view toward solving societal issues to benefit the business 	Strategies to meet societal needs are embedded in the business
Removing Internal Barriers	<ul style="list-style-type: none"> Include societal issues in project planning Develop cross-functional teams with fluency in business & societal issues Incorporate societal metrics into incentives structures Develop competencies and skills in dealing with societal issues across the business 	Companies link societal outcomes to business success
Measuring the Opportunity	<ul style="list-style-type: none"> Properly account for the full benefits and costs of shared value initiatives 	Societal issues are integrated throughout the business; full impact to business is understood
Embracing Collaboration	<ul style="list-style-type: none"> Identify promising areas for pre-competitive collaboration Develop new collaborations based on shared goals 	Companies launch multi-sector partnerships to address societal issues
Aligning with Government	<ul style="list-style-type: none"> Offer support for capacity building Design programs that create business benefits in anticipation of regulations 	Governments partner with companies to create conditions for shared value

comes and their impact on the business, and work with other multinational companies in the extractives sectors, NGOs, and governments. These steps embed shared value into the way extractives companies operate.

Recommendations for Other Stakeholders in the Extractives Sectors

Governments can play a critical role in shaping the landscape of shared value opportunity by taking action to encourage shared value adoption (e.g., setting a clear national development agenda, incorporating shared value principles into concession agreements); improving policies that create barriers to shared value creation (e.g., regulations that require companies to make social investments in areas outside of the core business); and supporting cross-sector partnerships by sponsoring research, convening disparate stakeholders, helping to implement shared value strategies, and incentivizing shared value investments.

NGOs, multilateral aid organizations, and other stakeholders can support shared value by finding the intersection between their missions and company interests, partnering with companies to improve local conditions and increase prosperity in host communities and countries, and sharing their expertise in measuring societal outcomes.

Finally, investors and financial institutions can encourage companies to adopt shared value strategies by promoting the development and adoption of accounting practices that reflect the social, environmental, and economic risks that materially influence the extractives sectors. In addition, financial institutions can adopt valuation practices that account for the costs and benefits of a company's societal strategy. Using these additional data points will lead to a greater understanding of how positive changes in countries and communities in which companies operate drive returns for companies.

Prelude: The Case for Shared Value

Papua New Guinea is experiencing one of the largest capital investments in its history through the Papua New Guinea Liquefied Natural Gas Project. The country must put in place the necessary governance and accountability mechanisms to ensure that the benefits of this investment are captured and fairly distributed among the nation's stakeholders. At the same time, business needs a working regulatory framework in place. In addition to making substantial direct investments in local human capital, workforce skills and enterprise development, it is important for the project's success to work with government to strengthen the enabling business environment, improve infrastructure, and build capacity on revenue transparency, revenue management and broader development planning and implementation.²



Many thousands of miles away, Rio Tinto's Oyu Tolgoi copper and gold mine in the Gobi Desert is expected to account for a third of Mongolia's GDP when the \$10 billion project becomes fully operational in 2020. The potential for human and economic development is clear: Mongolia ranked 108th in the 2012 United Nations Human Development Indicators and its GDP per capita is \$2,000.³ Oyu Tolgoi has committed to filling 90 percent of the jobs with Mongolians, and significant investment in country infrastructure – including rail, power, and water – also will be needed. The 50-year project's success hinges on building an enabling environment for the business.⁴

The Marcellus Formation, located in parts of Pennsylvania, Ohio, New York, and Maryland, contains huge quanti-

ties of shale gas and presents a massive opportunity for oil and gas companies, but capitalizing on the potential is not easy. Community concerns over environmental impacts and fluctuations in natural gas prices have led to project interruptions and cancellations. Another longer-term concern, however, presents perhaps a greater challenge: local employers have low confidence in finding qualified candidates for 14 different job functions that cut across energy sectors, which could translate into tens of thousands of jobs.⁵ At the same time, the Pennsylvania counties that sit on the Marcellus Formation lag other areas in the state in education and income.⁶ Addressing this mismatch is imperative for companies making investments in the region.

These three examples highlight the main research question undertaken in this report: how can oil and gas and mining companies, government, and civil society work together in the areas where extraction takes place to solve critical social and environmental problems at scale and in ways that satisfy companies' business imperatives?ⁱⁱ

Among all the sectors FSG has investigated for shared value potential, the extractives sectors offer some of the greatest opportunities. As the three above vignettes illustrate, shared value opportunities in places where the extraction activity takes place exist throughout the world. The companies in these sectors bring enormous financial resources to bear: the sample set of 26 com-

“Companies create shared value by creating economic value and societal value simultaneously. There are three distinct ways to do this: by reconceiving products and markets, redefining productivity in the value chain, and building supportive industry clusters at the company’s locations.”

Michael E. Porter and Mark R. Kramer,
“Creating Shared Value,” **HARVARD BUSINESS REVIEW**



panies used to inform this report alone generate nearly \$4 trillion in annual revenues.^{iii, iv} The sectors think in terms of project timelines that extend over decades, and rely on the communities and countries in which they operate for success. The sectors often operate in isolated, remote areas that lack effective local and national governments and offer few public services. The societal and business imperatives to create shared value are undeniable. This report explores ways to capitalize on that imperative.

ii. Several terms used within the industry can be analogous to “shared value,” such as shared benefits and mutual benefits. In several of the examples cited within the report, the companies highlighted do not refer to their projects as shared value initiatives. For the sake of simplicity, we use the term shared value in this report to refer to those projects or programs that deliver quantifiable business benefits that are linked to specific improvements in societal conditions.

iii. This figure is based on reported revenues in the most recently available annual report for each company.

iv. See Appendix A for a description of the methodology used in this report.



The Extractives Sectors and Society

Companies covered in the study profit from the extraction of a finite supply of natural resources. Despite the sectors' efforts to minimize their footprint, atmospheric emissions, water consumption, environmental impacts, and energy use are all realities. FSG recognizes that the world's reliance on fossil fuels merits public and political debate and that addressing climate change is one of today's more pressing societal issues. FSG also recognizes that the impacts of many extracting methods, such as hydraulic fracturing, merit careful investigation to avoid negative environmental consequences. Finally, we understand that some methods of extraction, such as those used in the oil sands, can have greater negative environmental impact than others.

As an organization that focuses on social impact, FSG does not take these issues lightly. We believe that climate change is an unprecedented problem that requires government, companies, civil society, and individuals to work together. As a start, oil and gas companies can do their part to reduce harmful environmental effects of extraction and invest more in the innovation of renewables to replace fossil fuels. This report does not dismiss these issues, but its focus is the sectors' upstream activities. We believe that this is the area where FSG can have the biggest impact and create positive change for both societal and business outcomes.

FSG also recognizes that extractive companies have a history of adverse environmental and social impact. These include incidents such as Ok Tedi, where mine pollution in Papua New

Guinea negatively affected the lives of 50,000 local people;⁷ the 11 million gallons spilled in Alaska by the tanker Exxon Valdez in 1989;⁸ and the Deepwater Horizon explosion and oil spill, which killed 11 workers and caused severe environmental damage to the Gulf of Mexico in 2010. The unrest caused by wildcat strikes in South Africa has been ongoing since 2012, when police shot to death 34 striking workers at the Lonmin Marikana platinum mine.⁹ Employee safety issues also have been a recurring theme in the sectors, most recently demonstrated by the Turkish coal mine disaster in Soma, which claimed approximately 300 lives.¹⁰ These episodes justifiably give communities cause for concern and vigilance.

This report assumes, however, that until society reaches consensus on how to reduce dependency on fossil fuels and transitions the global economy away from their use, an opportunity exists to improve the societal value of extraction activities in local communities and host nations. Demand remains for resources to feed society's growth and prosperity. The world's standard of living depends on the minerals, metals, and energy commodities that come from the extractives sectors, which are critical enablers of global prosperity through the products they create. As long as demand remains, the sectors will too. And as long as the sectors remain, the opportunity to build prosperity is too great to ignore. Through shared value, the extractives sectors have enormous potential to deliver these positive social outcomes by unlocking opportunities for economic and community development at scale.

Part 1: The Current State of the Sectors' Engagement with Society

The Cost of Missed Opportunities

Despite the potential for economic growth from extraction activity, recent history is littered with examples of missed opportunities for economic development and societal progress. A 2013 McKinsey study concludes that almost 80 percent of countries whose economies historically have been driven by resources have per capita income levels below the global average.¹¹ The vast majority of resource-driven economies also fall short on human development indicators.

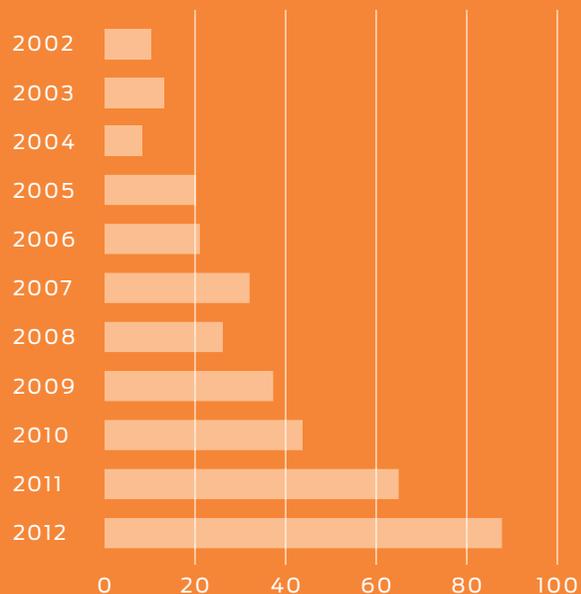
The sectors are not exclusively responsible for this lack of societal development. Many of these countries lack strong governments at the national, regional, and local level. The way in which revenues generated by the sectors are distributed also can limit development and increase conflict within a country, in particular when those resources are misappropriated. And the growth of the extractives sectors can have negative consequences for other sectors, as inflows of foreign investment can strengthen local currencies and make other sectors less competitive. But maximizing the sectors' positive impact on host countries and communities is critical for three reasons.

First, the sectors can serve as catalysts for economic development in frontier and emerging economies. This report will highlight examples of how companies have created meaningful positive societal impact in locations around their operations.

Second, the lack of societal progress has tangible business consequences, in the form of disputes with governments and communities that translate into costly delays and disruptions and undermine the health and safety of local communities. Conflicts with communities appear to be increasing. According to data compiled by the International Council on Mining and Metals (ICMM), the number of reported mining-related community conflicts has increased by more than eight times since 2002.¹²

Arbitration cases between governments and oil and gas companies increased more than tenfold between 2001 and 2010, while those for mining increased nearly fourfold.¹³

REPORTED GLOBAL INCIDENTS OF MINING-RELATED COMMUNITY CONFLICT (ICMM)



Most companies in the sectors do not understand the full range of costs associated with conflict, including lost productivity due to project shutdowns or delays, lost value related to future projects that cannot go ahead, and staff time diverted to managing the conflict.¹⁴ Even without accounting for the full picture of the true costs, however, the financial impact of disruptions is real. To cite just a handful of well-known examples:

- In 2013, an indigenous group twice forced shutdowns of BHP Billiton's Cerro Matoso, the world's second-largest ferronickel mine (4 percent of world output).¹⁵
- In 2013, Barrick Gold's share price plunged nearly 30 percent in two months, due in part to an announcement that community protests based on environmental concerns had led the Chilean government to paralyze its operations in Pascua Lama.^v
- A report on 25 cases of company-community conflict concluded that the net present value of major, world-class mining projects with capital expenditures of between \$3-5 billion will decrease by \$20 million for each week of delayed production.¹⁶

Many in the sectors are pessimistic about companies' abilities to reduce these conflicts. According to a survey of Latin American mining sector representatives, 69 percent believe that community challenges will determine mining investment in 2014.¹⁷ With almost half of the world's known mineral and oil and gas reserves in non-OECD, non-OPEC countries, resource extraction activity is moving to increasingly remote, under-developed areas with deep and pressing societal challenges.¹⁸ Responding effectively to these challenges is becoming urgent.

Third, traditional competitive advantages for companies are eroding. Engineering and technological excellence are now widely available to any major company and are becoming less of a differentiator for the major upstream customers: host governments and communities. Companies that can demonstrate that they can at the same time extract resources and contribute to development in communities and nations will have the competitive advantage in the future.

External Reactions to Societal Issues

To address the tensions between companies and host communities and governments, sector and industry associations, NGOs, and civil society organizations have emerged, dedicating themselves to addressing challenges for communities around extractives operations, drawing attention to the social and environmental performance of the sectors, developing international codes of ethics and conduct, and leading to positive changes in the way in which companies, governments, and communities interact.

Over the last two decades, companies in the sectors also have participated in and been steered by cross-sector initiatives such as the Mining, Minerals, and Sustainable Development Project (MMSD), the Extractives Industries Transparency Initiative (EITI), the World Economic Forum's Responsible Mineral Development Initiative, the Natural Resource Charter, the United Nations Guiding Principles on Business and Human Rights, the International Finance Corporation (IFC) Performance Standards for management of societal risks, the extractives sectors' Voluntary Principles on Security and Human Rights, the Equator Principles for financial institution management of projects' environmental and social risks, the OECD Guidelines for Multinational Enterprises, and others, which all attempt to give guidance on engagement with host countries and communities and performance on societal issues. These principles have started making their way into regulatory frameworks, with Section 1504 of the Dodd-Frank Act – still making its way through the rulemaking process – requiring that companies listed on U.S. stock exchanges report payments made to governments for access to natural resources.¹⁹

Finally, the work of organizations such as the Natural Resource Governance Institute (formerly Revenue Watch), Oxfam, Transparency International, 350.org, WWF, Greenpeace, and others all have increased attention on the activities of companies in the sectors and helped move the sectors towards stronger societal engagement practices.

v. Based on FSG analysis of Google Finance stock price information.

Company Responses to Societal Issues

Companies in the sectors realize the need to improve performance on societal issues, and many have spent decades trying to evolve their existing community relations efforts to better understand and address the impact associated with their operations. Because of their close connection to the communities and countries in which they operate, companies have developed sophisticated social performance functions and procedures. They conduct extensive environmental, social, and economic impact assessments prior to commencing operations, and they take active steps to mitigate their negative impact. They have created sector-wide associations such as the International Petroleum Industry Environmental Conservation Association (IPIECA) and the ICMM that help improve societal practices. Through these organizations and several others, practitioners have access to hundreds of published reports on stakeholder engagement, impact measurement, human rights, transparency, payments to governments, local enterprise and workforce development, and community grievance management, all designed to mitigate the sectors' impact on communities and reduce community risk.

A clear question remains, however: given all the urgency, attention, and good intentions, why are the sectors falling short on addressing both the business and societal issues? Beyond attempting to mitigate the negative impacts of the sectors, can companies proactively create additional business and societal value?

The business implications of disputes with communities and host governments – project delays, disruptions to operations, protests, and in extreme cases violent conflict – create costly risks. The focus on mitigating “above the ground” or “non-technical” risk has led many companies to address risks reactively by spending as much money as deemed necessary to secure the social license to operate (SLTO), or the implicit consent from

a community to carry out its operations. Protecting or improving a company's reputation often is seen as central to achieving the SLTO, and companies strive to make deposits in what one interviewee called the “bank of community goodwill.”^{vi,vii} This defensive, risk-based approach to engaging with communities has been highlighted in several reports on the sectors.²⁰

Dozens of company representatives interviewed for this report suggested that the idea of securing the SLTO through short-term risk management is a failure. It encourages all interested parties – local and national governments, communities, companies, and other stakeholders – to focus on the transactional aspect of the relationship between company and society, with dollars spent on social investment as the headline metric reported. As a result, many companies continue to increase their level of social investment as a way of demonstrating benefits to communities. To cite just one example, Chevron reported that it spent \$256 million on social investment in 2012, more than four times what it spent in 2003.^{viii,21} Studies suggest, however, that there is no positive correlation between the amount of money spent on community projects and the health of company-community relations.²²

Developing a long-term approach to building prosperity requires breaking the short-term cycle of investments driven by the desire to secure the SLTO and replacing it with consistent, determined efforts to build trust and create alignment between the success of the company and community development. The focus on the SLTO can make it very difficult to build the kind of relationships that are critical to the long-term alignment of company and community goals.

vi. A company's social license is the implicit consent granted by a community to a company to maintain its operations. A social license is not an outcome, but rather an indicator of community sentiment about a project, which is rooted in the beliefs, perceptions, and opinions held by the local population and other stakeholders (Boutilier and Thompson, *Social License to Operate* 2011).

vii. While we have attributed quotations where possible, we have used unattributed quotations in select cases to respect the wishes of those who helped inform and shape the research.

viii. Because there is no standard sector definition for what is reported as community or social investment, making cross-company comparisons is difficult. Where information is available, however, all companies that are part of the study's sample set have reported significant increases in this type of investment over the last decade.

The Role of Other Stakeholders

Companies in the extractives sectors are not solely responsible for creating a new approach to community engagement. A host of other stakeholders, including local and national governments, NGOs, and investors, among others, can contribute to improving outcomes.

Government. Governments and the extractives sectors have found themselves in antagonistic relationships countless times as both have tried to defend their interests. Recently, however, some governments have started to see extractives companies as potential partners in development. One example is the Africa Mining Vision – a policy framework agreed by African nations that “puts the continent’s long-term and broad development objectives at the heart of all policy-making concerned with mineral extraction” and highlights mining activity at the center of unleashing development potential.²⁵

NGOs. Activist NGOs historically have had adversarial relationships with extractives companies. Their often well-intentioned efforts to expose industry failings and empower local communities have led many extractives companies to view NGOs as a source of non-technical risk. Implementing NGOs, however, have become increasingly willing to engage with the extractives sectors to promote economic development. CARE, for instance, has partnered with Anglo American on a range of development issues such as poverty and HIV/AIDS. PATH and BHP Billiton have partnered to promote maternal health in southern Africa. Mercy Corps and Royal Dutch Shell are in the ear-

ly stages of a broad agreement aimed at achieving shared societal outcomes.

Investors. The mainstream investor community has taken an interest in how societal and government issues can affect business returns. FSG analyzed the available transcripts of the last year of earnings calls for the sample set of publicly traded companies used in this study. Of 53 investor calls to address analyst and shareholder priorities, more than 60 percent included some discussion of social, environmental, economic, and/or political impact of the operating environment, signaling that investors are attempting to understand the effect of societal issues on profitability. Yet there was not a single call where shareholders and analysts asked specifically about a company’s community strategy.

One of the challenges investors face in understanding the business risks and opportunities associated with societal performance is the lack of metrics that can be compared across companies and assets. Working in collaboration with industry and other stakeholders, the Sustainability Accounting Standards Board (SASB) is attempting to address this challenge by developing a complete, industry-specific set of accounting standards that reflect material issues for the sectors (e.g., community relations; security, human rights, and indig-



enous peoples; land use and biodiversity impacts; employee relations; business ethics and payments transparency). While specific metrics are still a work in progress, SASB believes that the development of common standards will lead to improved measurement across the sectors.²⁴

Financial institutions also are beginning to include societal issues in valuations. In its valuation of Australian natural gas and electricity company AGL Energy, for example, Credit Suisse has applied an additional 2.9 percent discount rate to account for concerns about community opposition and regulatory delays associated with a hydraulic fracturing project. Credit Suisse also studied the value at risk due to environmental, social, and governance issues in Australia and concluded that mining and hydrocarbons had AUS\$8.4B at risk, with an average impact on target share price of 2.2 percent.²⁵ In the seminal *Spinning Gold* study, the authors estimated the value of cooperative relationships with external shareholders at twice the market value of the companies' gold in the ground.²⁶

Project financiers. Projects in the extractives sectors rely heavily on financing from third parties because of their significant up-front capital requirements. Lending institutions have taken steps to increase accountability for social and environmental performance of loan recipients. The IFC, for instance, has established specific responsibilities for managing societal risks for all investment and advisory clients. The performance standards relate to eight areas: assessment and management

of environmental and social risks and impacts; labor and working conditions; resource efficiency and pollution prevention; community health, safety, and security; land acquisition and involuntary resettlement; biodiversity conservation and sustainable management of living natural resources; indigenous peoples; and cultural heritage.²⁷ The Equator Principles are designed to help financial institutions assess and manage environmental and social risk in projects and provides a minimum standard to use when conducting due diligence on projects. Currently, 80 financial institutions, covering more than 70 percent of emerging market international project debt, have adopted the Principles.²⁸

Paradoxically, the approach to community investments stands in stark contrast to the typical approach companies take to investing in projects and assets as shown by the table below. When making business decisions, companies consistently invest in long-term projects using detailed models to forecast net present value (NPV). There is strict accountability for delivering projects on time and on budget. Companies partner with each other – and with government – to reduce risk. In contrast, investments in communities are made reactively and with less concern for long-term outcomes. Actual outcomes are seldom tracked or reported, and partnerships with

other companies are seen as a risk to realizing the reputational benefits of community investments. If companies approached their investments in communities with the same rigor that they approach business investments, it is likely that investments would be made with longer time horizons in mind, that the results would be more vigorously measured, and that partnerships would be developed to deliver maximum returns on both the societal and business sides.

CONTRAST BETWEEN PRACTICES GOVERNING BUSINESS AND SOCIETAL INVESTMENTS

Business Investments	Societal Investments	Potential Best Practice for Societal Investment
Investments made with decades-long time horizons	Investments made year-to-year	Investments made with appropriate time horizon that enables progress towards societal outcomes
Millions of dollars spent on engineering designs during exploration	Investments in communities withheld because of uncertain exploration outcomes until certainty of reserve is established	Investments during exploration phase focus on improving the enabling environment sustainably and building trust with local community
Detailed NPV models used to forecast outcomes	Impact of investments in communities not well understood or measured	Business and societal impacts of investments in communities measured and evaluated
Strict management accountability for cost and delivery	Results of investments/programs not factored into performance evaluation	Societal metrics incorporated into performance evaluation
Intense collaboration with governments through JVs with state-owned enterprises	Reactive acceptance of government regulations	Proactive collaboration with government carried out in areas where interests align
Partnering with other companies intentional part of strategy to de-risk investments and reduce costs	Partnering with other companies viewed as too complicated and at odds with reputational goals	Partnering with other companies viewed as necessary for solving societal problems at scale
Focus on contribution of activity to business outcomes	Focus on inputs as metric to evaluate activity	Focus on intersection between business and societal priorities

Part 2: Shared Value in the Extractives Sectors

Shared value – defined as policies and activities that measurably improve socio-economic outcomes and improve related core business performance (e.g., decreased operational costs, enhanced productivity, and/or an improved business environment) – establishes a framework for identifying opportunities to address societal issues and deliver real business value.

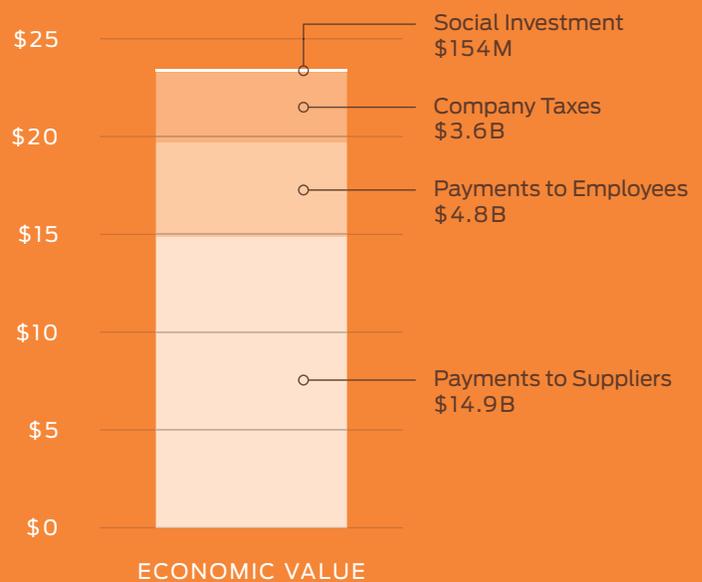
Shared value is about more than complying with regulations, managing a company's reputation, or adhering to international codes of ethics (e.g., transparency, human rights, anti-corruption). It is critical for companies to carry out these activities – but on their own they do not constitute shared value. Similarly, shared value strategies go beyond strong government relations, community engagement, community/social investments, and partnerships, though these may be foundational elements of a shared value strategy and shared value projects can be extremely difficult to execute without functioning national or local level governments. A portfolio of these activities can increase community prosperity and improve company performance, but the activities alone do not constitute shared value.^{ix}

Adopting a shared value strategy will not be a silver bullet to resolve tensions between companies and host countries and communities. Shared value is not the only avenue for companies to engage with society, nor should it be. But shared value can be a powerful, additive tool to the company's overall engagement with a broad range of stakeholders.

Shared value activities can originate throughout the company, and many successful initiatives start in business functions. In most cases, social investment funds are a minute part of a much larger pool of resources,

including taxes, royalties, and business investments, that could be geared toward societal issues. The Anglo American example below shows how payments to employees and suppliers dwarf social investment funds.²⁹

**ANGLO AMERICAN
ECONOMIC VALUE DISTRIBUTION
(2012, USD \$B)**



ix. This report addresses the links among these different components in the section titled "Shared Value in the Broader Societal Engagement Agenda."

Shared value is created in three ways:

1. **Reconceiving products and markets:** Develop or improve access to products and services that meet pressing societal needs and thereby create new market and revenue opportunities. In the case of upstream activity, this generally refers to finding new uses and markets for intermediary products or by-products from the extraction process, such as excess energy or water.
2. **Redefining productivity in the value chain:** Increase the productivity of the company by helping to solve the social and environmental problems that constrain quality and efficiency in its operations.
3. **Creating an enabling business environment:** Improve the operating context affecting business, such as regulatory factors, local supplier quality, availability of skilled labor, health care, and infrastructure and logistics networks, thereby decreasing costs, improving quality, and increasing the value of a company's assets.

This third level of shared value is especially relevant to extractives companies working in frontier regions and fragile economies. The development and community

deficits in some of these areas are deep, and extend beyond what companies in most sectors would consider relevant to their business success. But the long-term competitiveness of companies operating in these areas depends on the success of the host community and nation. This makes it critical for companies to understand the dynamics in the broader business environment that impact their competitiveness.

The three levels of shared value—reconceiving products and markets, redefining productivity in the value chain, and creating an enabling business environment—must be considered within the company's larger competitive context. The competitive context is driven by three determinants, as shown in the diagram below. The first determinant of competitiveness relates to the endowments of the area, such as natural resources or geographic location. The second set of factors has to do with the broader context in which the company operates, such as the monetary policy, the regulatory environment, and the level of human development. Lastly, factors related more directly to the company itself, such as the state of its supporting cluster and the company's strategy and operations determine competitiveness.³⁰

DETERMINANTS OF COMPETITIVENESS

Micro-Economic Competitiveness

Quality of the Business Environment

State of the Cluster Development

Sophistication of Company Operations and Strategy

Macro-Economic Competitiveness

Sound Monetary and Fiscal Policies

Human Development and Effective Political Institutions

Endowments

Natural Resources, Geographic Location, Population

As in other sectors, companies are identifying shared value opportunities related to microeconomic competitiveness, such as local content development and improvement in local workforce capabilities, though there is much more room for scaled initiatives. Fewer companies are creating intermediate products resulting from the extractive process, although opportunities related to energy and water are emerging.

The characteristics of the extractives sectors – e.g., long-term time horizons, the locations in which companies operate – mean that companies in the sectors must think about the macroeconomic determinants of competitiveness differently than companies in most other sectors would. Natural endowments are the basis for economic value. Capitalizing on them, however, requires macroeconomic conditions such as sound government policies, strong political institutions, and high levels of human capital. More frequently than many other sectors, extractives companies operate in areas that lack the most basic levels of human development and effective political institutions. This means that companies often have to play a role in improving the macroeconomic conditions, such as by investing in health care or education. Understanding the determinants of competitiveness, as well as the underlying root causes for deficiencies in communities, can reveal opportunities for shared value, but deciding how to prioritize efforts is difficult. On one hand, companies should not fill the role of government or become development agencies. On the other, many times governments are failing to meet the basic needs of their citizenry. There is no consistent set of activities companies should pursue: the needs in a more developed economy like Alberta, Canada, are different than those in emerging economies like Peru, or those of countries emerging from decades of conflict. As revealed in dozens of interviews, setting boundaries for investment and determining location-appropriate approaches to building the macroeconomic competitiveness of a host country, region, or community pose significant challenges to companies.

The determinants for competitiveness offer a theoretical framework and rationale for deep engagement for extractives companies. The table on the following pages shows a customized menu of shared value opportunities and specific examples for extractives companies that illustrate how companies are engaging on the ground. As the examples show, companies are investing in shared value initiatives that relate to both micro and macroeconomic competitiveness. The remainder of this report explores existing shared value initiatives and challenges to developing broader shared value strategies with the goal of providing guidelines for companies looking to invest in those strategies.

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Extractives Sectors Shared Value Menu of Opportunity

01

RECONCEIVING PRODUCTS AND MARKETS

Build local markets for intermediate products created by extractive activity (e.g., drinking or irrigation water, electricity):

Pacific Rubiales Energy Agrocascada Program

In Colombia, created a water reuse system that supplies irrigation water to 4,500 hectares of local crops and reduces company water reinjection costs by 20 percent.

Anglo American eMalahleni Water Reclamation Plant

In South Africa, supplies 12% of the eMalahleni municipality's drinking water while offsetting 60 percent of the cost of operating the plant by collecting fees from the municipality and another mining company whose water it treats.

02

REDEFINING PRODUCTIVITY IN VALUE CHAINS

Improve local workforce capabilities:

Newmont Mining Corporation Worker Apprenticeship Programs

In Ghana, develops local talent in mechanical functions, reducing Newmont's need for expatriate workers who can cost orders of magnitude more than local workers and improving earning potential for program trainees.

Strengthen suppliers in the value chain:

BHP Billiton World Class Supplier Program

In Chile, develops existing local suppliers so they can compete globally as world-class enterprises. As of December 2012, 36 suppliers were participating and employing more than 5,000 people and the program was estimated to have a net present value of US\$121 million in cost savings for the company.

Increase local disaster and emergency preparedness, response, and rehabilitation capabilities:

Shell Oil Gulf Coast Restoration Program

In the United States, restores degraded environments that provide protection for core assets such as pipelines.

Improve utilization of water, energy, and other resources in operations:

Canada's Oil Sands Innovation Alliance (COSIA)

Members of this collaborative have developed more than 550 distinct technologies and innovations that address industry challenges related to tailings, water, and greenhouse gases.

CREATING AN ENABLING LOCAL ENVIRONMENT

Develop the local cluster supporting the extractives sectors:

BP Azerbaijan

Enterprise Development Program

More than 120 emerging local hydrocarbon sector companies have completed business planning and capability building programs. In 2012 alone, BP Azerbaijan signed 61 long-term contracts with participating companies, worth a total of \$1.1 billion.

Invest in shared infrastructure and logistics networks:

Rio Tinto

Madagascar Port

Through a joint venture with the Madagascar government, Rio Tinto saved 13 percent of capital investment costs for a new port, while earning goodwill with the local government. The port supports government and World Bank plans for investments across industries.

Partner with other local clusters and government in building community infrastructure:

AngloGold Ashanti

Malaria Program

AngloGold Ashanti's malaria control program reduced the local disease burden by 72 percent over two years and resulted in a 98 percent reduction in lost person-shifts at the AngloGold Ashanti mine in Ghana, in addition to about \$600,000 savings in reduced treatment costs.

Play an active role in broad-based regional economic and community development:

Chevron

Foundation for Partnership Initiatives in the Niger Delta (PIND)

Collaborative venture (with the United States Agency for International Development (USAID), the Department for International Development (DFID), and others) that aims to enable economic growth in the nine oil-producing states in the Niger Delta. Using a data-driven approach, PIND has identified several potential growth industries for the region and is also looking for opportunities to build linkages to Chevron's supply chain.

Improve local governance capacity:

Newmont Mining Corporation

Ahafo Development Foundation

Foundation created by Newmont in Ghana to help build governance and decision-making capabilities in local communities, thereby reducing conflict and improving regional stability.

Improve national governance capacity:

ICMM

Zambia Mining Partnership for Development

In collaboration with government and other stakeholders, ICMM identified areas for development in resource management governance that, if implemented, would create a more stable environment for companies and improve government's ability to benefit communities.

1. Reconceiving Products and Markets

In most other sectors, creating shared value by reconceiving products and markets means developing or adapting the end product to address new, unmet societal needs. In upstream extractives activities, however, reconceived intermediary products such as excess energy, flare gas, and water, can benefit underdeveloped communities and deliver business benefits.

Water

Drinking or irrigation water is a shared value opportunity for the extractives sectors. Anglo American's eMalahleni Water Reclamation Plant in the Mpumalanga Province in South Africa is one example. Anglo American operates several coal mining projects in the Province. One of the consequences of coal mining is acid mine drainage, or runoff of acidic waters from mines. If not managed carefully, the runoff can contaminate aquifers and river systems, and companies must comply with stringent regulations for treating it in South Africa. These regulations extend in perpetuity, beyond a mine's productive life. Anglo American's underground coal workings hold around 140 million cubic meters of water that require treatment.³¹

Because the Mpumalanga Province and eMalahleni in particular face severe drinking water shortages, Anglo American saw an opportunity to use a byproduct from its production processes to deliver social and business value. The company decided to treat its water to drinking water standards and make the water available to the local municipality. With the plant now operational, Anglo American is able to meet 12 percent of the municipality's daily water requirements, generating 25-30 million liters per day.³²

ANGLO AMERICAN

Business Benefit	Societal Benefit
Treatment costs offset by revenues from water sale	Access to potable water in local community

Anglo's success has also allowed the company to sell water treatment services to BHP Billiton, which owns a closed coal mine in the area whose acid mine drainage requires similar treatment. The additional revenue generated through the agreement with BHP Billiton plus the revenues from the sale of water to the local municipality offset 60 percent of the cost of operating the plant. By incorporating a societal component into its

Pacific Rubiales Energy's Agrocascada Program

Pacific Rubiales Energy (PRE), the largest independent oil and gas exploration and production company in Colombia, is another extractives company with a water shared value initiative. Water shortages are a serious problem for Colombia's agriculture industry. The country's agricultural sector water consumption was expected to double between 2008 and 2019.³⁷ The oil sector produces an abundance of water from its processes. Disposing

of the water cheaply, efficiently, and responsibly is a real business need. PRE typically had disposed of residual water through a process called "re injection" into well pads at an average cost of \$0.22 per barrel of water.³⁸

Seeing a societal opportunity matched with a business need, PRE created Agrocascada, an entity to manage the company's water treatment process. Together with

several partners, Agrocascada treats water to a standard at which it may be used safely and productively on bio-fuel crops around PRE's operations. The initiative delivers significant value to PRE's business. Water treated through the program reduces reinjection costs for PRE by more than 20 percent, or \$400 million over the next 15 years. The anticipated social return is also significant. As well as addressing the ongoing water shortages in the

business planning, Anglo American has reduced the cost of responsible environmental management and compliance with regulation and delivered meaningful benefits to society.³³

Energy

Access to electricity is a major societal need worldwide. Around 1.4 billion people lack access to electricity, and another billion have unreliable access.³⁴ Governments and multilaterals around the world are placing increasing emphasis on access to electricity through initiatives such as USAID’s Power Africa. On the business side, extractives companies’ operations use massive amounts of energy, and often have to invest in major capital projects to build power plants near their operations. Working with others to develop solutions to local energy shortages can create cost savings and revenues for business while providing local communities with access to energy. A World Bank study, for instance, suggests that developing a centralized energy plant in Liberia to provide energy for all mining projects plus a surplus for the national utility would produce collective savings to the sector of \$1.6 billion over 20 years.³⁵

While the needs for energy are massive and companies can save billions through more innovative energy utilization, models to generate revenues and savings from energy products are at this point nascent. At present, companies are experimenting with programs to deliver benefits to the business and local communities.

Shell is one company that is exploring how to deliver electricity to local communities sustainably. Because of its role as an energy company, Shell has adopted access to energy as one of its three global themes for social investment, and in Nigeria, it found a way to align its social investment with priorities for the business and the host community. Shell has established a sustainable utility company on Bonny Island, Nigeria, that serves 93,000 customers. The utility uses power generated by gas turbines at an LNG plant and an oil export terminal on the island. All customers receive a free allowance of electricity and may pre-pay for additional access. The revenue generated by paying customers means that the utility can operate sustainably.³⁶

Water treated through the program reduces reinjection costs for PRE by more than 20 percent, or \$400M over the next 15 years.

southeast plains of Colombia, the program has the potential to create an estimated 2,000 jobs. Since the majority of PRE’s operations are located in places of water scarcity, there is potential to scale this initiative across the business to deliver benefits to other agricultural communities.³⁹

PACIFIC RUBIALES

Business Benefit	Societal Benefit
Reduced water treatment costs	Provision of water for agriculture in water-scarce region

CLARKE ENERGY

Business Benefit	Societal Benefit
Reduce fuel costs	Improved access to energy for host communities

Associated petroleum gas is another byproduct of the petroleum extraction process that can be transformed into energy and provided to local communities. Because it requires pipelines and other costly infrastructure to transport, the gas often is burned off onsite as flare gas, with the potential for adverse impacts on surrounding communities and the environment. Companies increasingly are attempting to use flare gas instead to power operations at the point of extraction – driven at times by government regulation and international agreements on flare gas. The surplus energy generated can be provided to local communities, and capturing the flare gas not only reduces greenhouse gas emissions but it also reduces on-site fuel costs, particularly in remote locations where it is difficult and costly to transport other fuels. Clarke Energy, a distributor and service partner for GE Energy gas engines, estimates that the more than 330 GE Jenbacher systems installed since 1998 save 900 million liters of diesel fuel per year for companies.⁴⁰

2. Redefining Productivity in Value Chains

The value chains of integrated global extractives companies can extend from the point of extraction all the way to the ultimate point of use of the product and cover every activity from extraction to processing and transport to refinement to value addition to marketing. This report focuses on the value chain activities closest to the point of extraction and most likely to impact host countries and communities. Opportunities for shared value creation in the upstream operations of the extractives sectors primarily improve the productivity of suppliers and the local workforce and reduce the use of natural resources in production.

Workforce and Supplier Productivity

Through their upstream activities, companies can address issues such as lack of local jobs through changes to their value chains. One way of doing this is by reducing costs or improving quality and reliability of local

suppliers, as BHP Billiton has done through a collaborative effort between its business and community relations functions. To create enterprises that can compete at a global level and provide world-class service, BHP created the “World Class Supplier Program” in Chile. The program engages local suppliers to develop innovative solutions to manage various areas of BHP Billiton’s operations, such as water, energy, human capital, maintenance, air quality, acid mist control, and leaching. The suppliers are then encouraged to launch those innovations on the global market. The goal of the initiative is for Chile to have at least 250 world-class suppliers that can export their services to mining projects around the world by 2020. As of December 2012, the program was estimated to have a net present value of \$121 million in savings on the cost of inputs, goods, and services.⁴¹ Also by that time, the program worked with 36 suppliers, which employed more than 5,000 people and had generated combined sales of \$400 million.⁴²

BHP BILLITON

Business Benefit	Societal Benefit
Reduced cost of inputs, goods, and services	Creation of world-class suppliers for the mining sector and high-quality employment

Newmont’s Ahafo and Akyem worker apprenticeship programs in Ghana similarly deliver business value by creating a local workforce that can fill jobs that require high technical skills, such as electricians, mechanics, mine maintenance and operations technicians, and welders. The full cost of using an expatriate or a non-local to fill those roles could run more than 20 times the cost of paying a local employee to fill the same function, so creating that trained local workforce is in Newmont’s

NEWMONT

Business Benefit	Societal Benefit
Reduced employee costs	Increased employability and wage-earning potential

business interests. Local employees have also demonstrated improved safety performance and earn higher wages by taking on more technical roles. The training

helps increase their employability should Newmont not be able to hire all trained locals. Similarly, trained locals have proven to pose a lower retention risk, providing more continuity to the business. To date, 138 apprentices have been trained through the program.⁴³

Use of Natural Resources

Canada's Oil Sands Innovation Alliance (COSIA) represents another example of potential cost reductions in company value chains. A collaboration among 12 oil sands producers,^x the Alliance formed in response to a public outcry after 1,600 ducks landed in one of Syncrude Canada's tailings ponds in April 2008. This crisis prompted an urgent call to action for these companies to improve their environmental performance. Recognizing their mutual interest in addressing critical environmental issues, the potential cost savings in working together to develop solutions, and the urgency of environmental issues related to the oil sands industry, participating members saw that collective, pre-competitive action on these complex issues was a more cost-effective way to take them on.

COSIA

Business Benefit	Societal Benefit
Reduced R&D costs for improving environmental performance; process cost savings from some innovations	Improved environmental performance by sector

Through its members, COSIA finds solutions to environmental challenges shared by its members in tailings, water, land use, and greenhouse gases. Companies share environmental data to drive solutions and innovations in each of these areas. As of February 2014, COSIA members have contributed 560 innovations for collaborative development.

Not all of these innovations are guaranteed to deliver a shared value outcome. Some environmental innovations could raise costs for companies that choose to implement them. However, COSIA's model has created a collaboration that makes it easier to identify shared value innovations. Companies are pooling their R&D

funds and, in doing so, reducing costs to each individual company while at the same time improving environmental outcomes, with the potential for developing technologies that reduce business costs simultaneously.⁴⁴

3. Creating an Enabling Local Environment

The first two levels of creating shared value refer to activities that primarily occur within the business itself. Creating an enabling local environment for the business addresses issues outside of the company walls. As mentioned earlier, in the case of the extractives sectors, the enabling environment can be improved in two ways:

- By investing in a company's cluster (i.e., geographically concentrated companies and institutions that work in the sectors, including suppliers and the broader labor pool that serves the sectors).
- By improving wider business and community infrastructure to improve macroeconomic determinants of competitiveness.

Investing in the Cluster

Reduced supply chain and employee costs, reduced employee turnover, or increased revenue from services are examples of these benefits with measurable links to the business.

BP's Azerbaijan Enterprise Development Program focuses on value creation for the national economy by developing entrepreneurs and preparing them to participate in the supply chains of oil and gas companies. In contrast to the BHP Billiton example, where the company strengthened existing suppliers, BP's Azerbaijan program attempts to set up new businesses, generating local economic development and employment opportunities. When BP first began to establish itself in the Caspian region at the turn of the century, it focused on building a local procurement portfolio of very simple goods and services. Initially, this program was seen as a way to meet regulatory requirements for local procurement and boost BP's reputation in the immediate local community. As the program evolved, however, BP identified a business opportunity in building a cluster of companies within the oil and gas industry, and it transitioned the program from its social investment to its procurement

x. The Alliance began with 13 members but two participating companies later merged.

function. BP also expanded the program nationwide to bolster the broader economy and provide additional support for business needs.

BP	
Business Benefit	Societal Benefit
Reduced supply chain costs and risks	Increased job opportunities

Today, through its “Enterprise Center,” BP has enabled businesses all over the country to participate meaningfully in the company’s supply chain. BP’s program aims to develop suppliers that can have a national-level impact by creating jobs and economic development opportunities. The sustainability of these suppliers beyond BP’s presence in Azerbaijan is based on their ability to compete at a global level.

Qatar Shell’s education and training partnership with Qatar Petroleum and Hamad Bin Khalifa University, Tafawoq (which means “Excellence” in Arabic), is an example of an emerging workforce development program

with national implications. The goal of the program is to address skill gaps at the national level. Recognizing a growing need for project management expertise to support the delivery of capital investment projects in Qatar, both within and outside of the oil and gas sector, the company has invested in high-quality project management training to Qatari citizens. By investing in skills development, the company is supporting the country’s national development strategy. At the same time, Shell’s ability to hire local project managers will reduce the high cost of posting expatriates in Qatar.⁴⁵

SHELL	
Business Benefit	Societal Benefit
Reduced employer costs	Increased employability and wage-earning potential

AngloGold Ashanti’s Malaria Control Program

AngloGold Ashanti in Ghana realized, as many other companies in the sectors have,^{xi} that addressing health problems at the broader community level saves money and increases productivity in the process. AngloGold Ashanti is a global gold mining company with operations throughout Africa, the Americas, and Australia. Many of the countries in which it operates face serious health problems. In Ghana, for instance, malaria is endemic. One of AngloGold

Ashanti’s major mining operations in Ghana is located in Obuasi, in the southern part of the Ashanti region. For a company that relies on a local workforce, the health of the community is critical, and high rates of malaria among mine workers severely affected the business.⁴⁶

In 2005, the hospital operated by AngloGold Ashanti and located near the mine treated an average of 6,800 malaria cases per month, of

which 2,500 were mine employees.⁴⁷ That figure represented more than 30 percent of the workforce at the mine. Worker absenteeism and low productivity during recovery entailed serious costs.⁴⁸ Beyond the direct effects of infection on the worker population, the disease also had secondary impacts on productivity, as mine workers often stayed home from work to care for sick family members.⁴⁹

xi. ExxonMobil, Freeport McMoRan, Marathon, Newmont, and Shell are among the companies with successful malaria control programs.

Improving Wider Business and Community Infrastructure

As already mentioned, companies in the extractives sectors find themselves in circumstances that require investments in broader determinants of competitiveness. Because of the places in which companies operate, they face issues that other sectors could ignore, such as lack of infrastructure, poor public services, or lack of adequate housing. Strengthening local and national institutions, improving the health of the local community, and creating economic development opportunities all can improve a company's enabling environment at the local or national level. Although many of these investments in broader social prosperity are nascent, companies are investing in them because they believe that those investments will in turn create real business returns as well. In many cases, these investments are made via foundations or social investment functions that are not linked directly to the business, but they are made nonetheless with the long-term interests of the business in mind.

Suncor Energy Foundation's investment in the Wood Buffalo municipality in Fort McMurray, in Alberta, Canada provides one example of a company striving to have an impact on its broader enabling environment while trying to deliver tangible business benefits. Suncor believes that if these communities face significant societal challenges, the company will face greater difficulty in hiring and retaining a local work force, which raises the costs for recruitment and also forces the company to rely on fly-in/fly-out employees, at a higher cost.

Suncor originally attempted to address these issues through traditional philanthropy but did not see the results it wanted. "We had given more than \$100 million in community investments, but we weren't clear on what we had done to move the needle on social issues," says Cathy Glover, director of community investment at Suncor. Despite Suncor's high levels of investment, the root causes of societal needs in the area were not being tackled, and one-off investments did little to solve the issues that created challenges for the business.

For a company that relies on a local workforce, the health of the community is critical, and high rates of malaria among mine workers severely affected the business.

In 2005, the company set out to tackle malaria at the community level by implementing an integrated control program. While the program involved multiple community-level interventions, the primary aim was to reduce worker absenteeism by 50 percent over two years.⁵⁰ Only two years into the program, the disease burden in the local community had decreased by 72 percent.⁵¹ By 2012, the number of person-shifts lost each month had fallen from 7,500 to

ANGLOGOLD ASHANTI

Business Benefit	Societal Benefit
Improved employee productivity, lowered treatment costs	Decrease in disease incidence

around 90. Treatment costs showed a commensurate decline, bringing in cost savings to the company of around \$600,000 per year by 2013.^{xii}

xii. This figure (exact number \$599,280) was calculated by multiplying the average treatment cost for each individual case of malaria (\$22) by the number of cases reduced by the program (2,270 per month = 27,240 per year).



Local Content as a Regulatory Requirement vs. a Business Opportunity

Local content is one of the more intuitive areas for exploration of shared value opportunities. Host governments increasingly have mandated local content requirements for the extractives sectors as a way to guarantee investment from companies in local and national economies, and companies have seen concomitant increases in local content requirements attached to concession agreements. Given local conditions, it can be a challenge to meet these requirements. Well-intentioned government policies that require certain percentages of goods and services to be procured locally can

be difficult to fulfill based on the availability of viable suppliers in the area. Several interviewees have stated that it is impossible to create business value via local content, citing a 10-20 percent cost premium that does not include decreases in quality or reliability. Assuming that it is not possible to extract value from local content, however, is a significant financial gamble for large multinational companies.

Take the following illustrative example, based on one company's reported spending on suppliers and research from the McKinsey Global Institute:⁵²

ILLUSTRATIVE EXAMPLE OF THE VALUE OF LOCAL CONTENT

Amount paid to suppliers in countries with local content requirements

\$13.4 billion

This represented over 40 percent of the company's revenue in 2012; a total of 87 countries worldwide have local procurement requirements, according to McKinsey

Assumption about average local content requirement

25 percent

Some countries have local procurement targets as high as 50 percent

Cost premium for local content

15 percent

Interviewees gave a range of 10-20 percent for the additional cost of meeting local content requirements

$$\$13.4B \times 25\% \times 15\% = \$500 \text{ million}$$

In this illustrative example, assuming that local content is an added cost and focusing on meeting regulatory requirements rather than building the capabilities of local suppliers would constitute a \$500 million-a-year bet on the lack of potential opportunities.

Investing in low-value-add opportunities like catering, gardening, security, and transport is clearly important to local economies, and compa-

nies should continue to do so. Although developing local suppliers in higher-value opportunities is difficult and can require a larger investment up-front, the business benefits of doing so can be more significant. And while it may seem hard to envision in the short term, taking a long-term view on developing local content can lead to the emergence of strong local suppliers that provide real business benefit. Acden – a services business owned by the Athabasca Chipewyan First Nation

“In Zambia, 80 percent of goods sourced locally are from briefcase companies that are just serving as intermediaries between multinationals and the mining operations.”

and serving the Canadian oil sands industry – is an example of a local supplier success story. Acden was founded in the mid-1990s with a modest waste removal contract with Alberta oil sands company Syncrude. Since then, the organization has grown aggressively to become one of the leading service providers to the oil sands industry. The company currently comprises 17 oil sands services businesses that together employ 3,000 people and has developed competitive advantages in the oil sands industry. A new 24-hour staffing program, for example, enables Acden clients to address their workforce challenges with a local, “on-call” labor force – a critical business need in a region that often suffers workforce shortages.⁵³

ACDEN

Business Benefit	Societal Benefit
Increased reliability and improved response time of supplier base	Increased job opportunities for locals in higher-skill functions

While local content perhaps provides the clearest opportunity to create shared value, similar opportunities to deliver real value for the business as well as society exist across different areas of investment, as illustrated in the table below. Approaching these investments with a shared value mentality can lead to very different programs than would be developed if companies used a philanthropic approach.

PHILANTHROPY VS. SHARED VALUE IN OTHER AREAS

Philanthropic Approach	Area of Investment	Shared Value Approach	Business Benefit	Social Benefit
Drill drinking water wells for local community	Infrastructure	Develop sustainable water utility leveraging business processes	Reduce water treatment costs by charging commercial water rates	Provide water to communities that lack access to it
Provide broad-based skills training with no link to employment opportunities	Training	Create training program based on business and supplier needs and link it to jobs	Reduce employee costs by reducing reliance on expatriate employees	Improve employability and wage-earning capabilities of local workforce
Invest in environmental restoration that is unrelated to the business	Environment	Restore degraded coastlines or wetlands to reduce risk of a natural disaster to the business	Protect assets (e.g., pipelines) near coastlines from disasters	Improve the resilience of host communities to natural disasters
Fund construction of local clinic	Health Care	Develop program to reduce disease burden among population living in mine catchment area	Improve employee productivity and reduce company health care costs	Reduce the disease burden in local communities
Provide scholarships for local students	Education	Catalyze coalition to improve secondary school educational outcomes in host community	Improve the quality of the future talent pool in host communities	Improve educational achievement and job prospects for students

SUNCOR

Business Benefit	Societal Benefit
Increased employee retention, lowered employee costs	Increased capacity to tackle important local societal issues

The realization that traditional philanthropic investments were not improving the overall enabling environment led to the formation of the Social Prosperity Wood Buffalo (SPWB) project, which is designed to improve quality of life in Wood Buffalo by strengthening the ability of local NGOs to take on critical societal issues that are not being addressed.⁵⁴ Through on-the-ground investigation and deep analysis, Suncor realized that it could not just give money away in hopes that societal issues would improve. The company first had to build up the entities addressing societal problems by understanding where gaps in their capabilities existed.

The particular capabilities in which SPWB is investing include developing human resources for the NGO sector, building effective NGO organizations, and increasing their societal impact. To determine which issues needed addressing, SPWB conducted a baseline capacity assessment of over 100 organizations in the region. With an accurate understanding of what was required to improve capacity among NGOs in the region, SPWB now delivers trainings on topics such as board governance, facilitates the creation of shared services among NGOs that lower costs, and provides access to finance through bank partners. Suncor also has a secondment program with SPWB in which a company employee spends two years working with SPWB.⁵⁵ These investments are driven by the desire to address root causes of societal issues in Wood Buffalo. Suncor recognized that any on-the-ground change required an understanding of the entire system for delivering social services and improving the quality of life in Woods Buffalo, which led it to use philanthropy to co-create solutions with the

Chevron's Partnership Initiatives in the Niger Delta

Chevron has operated in the Niger Delta for more than 50 years and, despite heavy investment in community and societal issues, the company had long faced significant business costs related to oil theft, work stoppages, and high security needs. Past efforts mostly addressed immediate community needs but failed to tackle the underlying causes of the region's high poverty rates and limited economic opportunity. In 2010, Chevron decided to take a different approach and brought together government and development stakeholders to create the Niger Delta Partnership Initiative (NDPI) and the Foundation for Partnership Initiatives in the Niger Delta (PIND). NDPI engages a

network of international partners to increase donor interest in the region. Meanwhile, PIND, which serves as NDPI's local presence in Nigeria, operates two economic development centers in the Niger Delta and oversees the program implementation, partner engagement, and research. Together with USAID, DFID, and others, Chevron committed to invest more than \$100 million over five years (with Chevron committing \$50 million) to enable economic growth in the nine oil-producing states in the Delta. By investing in the region's long-term prosperity, Chevron took a fundamentally different approach to typical social investments. According to Dennis Flemming, Executive

Director of NDPI, "we're there to take a long-term approach, linked to the company but with the arm's length independence to focus solely on reducing the instability in the region and making it a better place for the company to do business."⁵⁶

To build prosperity in the region and improve its operating environment, PIND uses a data-driven approach to identify new market opportunities and local solutions to unemployment in the region and aims to share those solutions with other partners. PIND began by assessing trends and current expenditures in Chevron's supply chain to identify promising opportunities to generate jobs and income. That analysis led PIND to conclude

community while working in strong partnership with local organizations.

In the same way that other companies have developed their local supplier base to deliver business value, Suncor is investing in developing the NGO community, betting that these suppliers of social services will deliver tangible business value by creating a more livable community and making it easier to recruit and retain employees.

Suncor and Chevron (see the Partnership Initiatives in the Niger Delta case study below) believe that their investments will deliver business value over the long term by improving the conditions in which they operate. They have established a link between societal deficits and business performance, and have taken steps to address the underlying root causes of these deficits. The companies have made these investments understanding that they will deliver business benefit only in the long term. They know, however, what they expect the business and

societal benefits to be and the metrics they can use to track progress on both fronts. This approach distinguishes their investments from philanthropic investments in communities that are made simply in response to local demands.

“...we’re there to take a long-term approach, linked to the company but with the arm’s length independence to focus solely on reducing the instability in the region and making it a better place for the company to do business.”

that creating a measurable impact in the near term would require enterprise and market growth outside of Chevron’s direct supply chain. After additional value chain analyses, the PIND team identified palm oil, poultry, cassava, and catfish as promising markets for growth within the Delta. PIND is also now exploring opportunities to create new markets for those products while linking programs back to Chevron’s business by seeking connections to Chevron’s supply chain. It is further aiming to set standards for other companies and development agencies to adopt going forward.⁵⁷

PARTNERSHIP INITIATIVES IN THE NIGER DELTA (PIND)

Business Benefit	Societal Benefit
Reduction in business disruptions due to greater economic opportunities outside of oil and gas	Development of economic opportunities outside of direct oil and gas supply chains

Part 3: Seizing the Opportunity

The shared value case studies presented above describe specific programs in single geographies that create shared value. To identify and execute shared value strategies consistently, however, a deeper intentionality within each company is needed. Just as important, companies need guidelines to understand how far they should go in taking on societal issues.

It is important to state that shared value activities do not occur in isolation from the rest of the company, and a company's broader portfolio of societal engagement activities can affect its ability to create shared value. Companies may need to address other issues related to community engagement before considering how to prioritize shared value activities. The importance of establishing and sustaining trust is difficult to overstate. Without the trust of local communities, a company will struggle to implement a successful shared value initiative. The way a company conducts itself in host communities and countries will affect trust, as will perceptions about how much a community is benefitting from company activity. The ways in which company activities can reinforce each other and strengthen the overall societal and business outcomes are described in the section entitled, "Shared Value in the Broader Societal Engagement Agenda."

Prioritizing across Areas for Investment

In all sectors, identifying shared value opportunities generally starts with understanding societal needs that are related to the business. In the case of a company working in extractives, the list of societal issues likely will include those related to the broader business environment, such as education, health care, and government capabilities. Companies can prioritize societal needs by considering which issues are most important to host communities, the scope of the issues, those that can be

addressed sustainably, and those that could generate long-term prosperity. This approach to identifying societal needs is broadly consistent with many environmental and social impact and needs assessments that companies carry out today.

Once companies have identified societal issues, the next step is to identify opportunities for linkages with their business. Shared value investments can lead to improvements in company operations (for example, by reducing the cost of hiring and retaining employees) and improvements in the local environment that reduce non-technical risk.

Example metrics that can be used to evaluate the business value of investments in the broader business context are presented on the facing page. The metrics cover but are not limited to those related to risk reduction, including reductions in production costs and increased productivity. Although determining attribution and measuring some of the proposed metrics will be extremely difficult, keeping them in mind as the ultimate objective can help companies design programs that aim to address them.

Establishing this link and using it to help prioritize programs and investments may be the most important mind shift needed for companies to realize shared value opportunities. By tying societal improvements to business success through the metrics, companies achieve three important objectives.

BUSINESS METRICS FOR SHARED VALUE INITIATIVES

Source of Increased Competitiveness	Desired Outcome	Potential Metrics
Improvements in company operations	Reduced supply chain or operational costs	<ul style="list-style-type: none"> Reduction in cost of supplies based on local procurement Reduced downtime/risk as a result of presence of local suppliers Reduction in treatment or byproduct disposal costs
	Reduced labor costs	<ul style="list-style-type: none"> Reduction in turnover Reduction in shifts lost to health issues Improved workforce productivity Reduction in expatriate workers
	Increased revenue from intermediate byproducts or other services	<ul style="list-style-type: none"> Generation of revenue from water provision Generation of revenue from energy provision
Improvements in company environment	Improved infrastructure	<ul style="list-style-type: none"> Reduction in cost of transporting goods to market Reduction in accidents due to poor infrastructure Improved resiliency to natural disasters Improved emergency response capabilities
	Reduced non-technical risk	<ul style="list-style-type: none"> Reduction in work stoppages, protests, or other incidents compared to baseline Reduction in security costs due to lowered incidents of conflict and sabotage
Increase in asset/project valuation	Improved position as government partner of choice	<ul style="list-style-type: none"> Decrease in permit approval time Increase in participation in tenders due to improved social performance
	Increased valuation of asset	<ul style="list-style-type: none"> Decrease in discount rate used to value asset due to improved operating environment
	Lowered costs at shutdown/exit	<ul style="list-style-type: none"> Lowered environmental remediation costs Lowered costs of transitioning population to non-extractives sectors

- First, the metrics allow those who design strategies to estimate potential benefits to the business. Even if these estimates are rough, they can still give a sense for scale and guide prioritization.
- Second, the metrics create an anchor for the strategy. As it is rolled out, any strategy likely will evolve based on lessons learned and shifting priorities among

stakeholders. Keeping the stated business goals – whether improved operations, improved business environment, or higher asset/project valuation – front and center when making any needed adjustments to the strategy can help ensure that business motivation is maintained.

- Third, the metrics provide those who develop and implement the strategies with a set of performance indicators through which to measure the success or failure of a strategy, as in other areas of the business.

Finally, companies should consider the ability to execute a program in the areas identified. An assessment of company capabilities and assets is the starting point, but understanding whether the issue aligns with local, regional, or national government priorities and how they might support the initiative – if at all – is critical. Understanding the local ecosystem of community

organizations (e.g., elders associations, NGOs, other community-based organizations) may allow companies to identify others who can help design and implement initiatives. The table below outlines a potential sequencing for shared value opportunity identification, including some questions for consideration when assessing societal needs, the business context, and the local operating environment.

These questions are meant as guidelines, and other considerations based on local circumstances also may lead companies to rank investments differently. For instance,

PRIORITIZING SHARED VALUE OPPORTUNITIES

Relevant Issues in Host Communities/Countries	Relevant Issues for the Business	Considerations for Program Delivery
<ul style="list-style-type: none"> → What are the areas of deepest need in host communities/countries (e.g., full employment, improved secondary education, access to energy)? → What factors are creating those issues (e.g., lack of stable governance, lack of infrastructure, insufficient trained professionals)? → What are the societal priorities at the local and national level? Which of these priorities are aligned? → Can the company have a positive impact on the issue? 	<ul style="list-style-type: none"> → How will an investment in this area lead to improvements in operations (e.g., reduced supply chain costs, reduced labor costs, increased revenue from other services)? → How will an investment in this area improve the company's enabling environment (e.g., improved social/physical infrastructure, reduced non-technical risk)? → How will an investment in this area increase the value of the asset (e.g., improvement in position as government partner of choice, increased valuation of assets)? → Would an investment in this area align with business priorities? Can the company meaningfully participate in addressing the issue? 	<ul style="list-style-type: none"> → Can the business and societal outcomes be measured, and can program efficacy be evaluated using these measurements? → Does the company have the assets and expertise to develop an effective program to address the issue? If not, how can the company find partners for collaboration? → Are there systemic challenges that would prevent development of a sustainable program to address the issue? → Can a new initiative complement existing local, regional, or national programs? → Do other partners within the local ecosystem (e.g., elders associations, NGOs, other community-based organizations) exist? If not, can they be developed?
<p style="text-align: center;">▼</p> <p>These questions can help create a prioritized list of societal issues to explore for links to the business</p>	<p style="text-align: center;">▼</p> <p>These questions can help link business needs and opportunities to prioritized societal issues.</p>	<p style="text-align: center;">▼</p> <p>These questions can help determine the feasibility of addressing these issues</p>

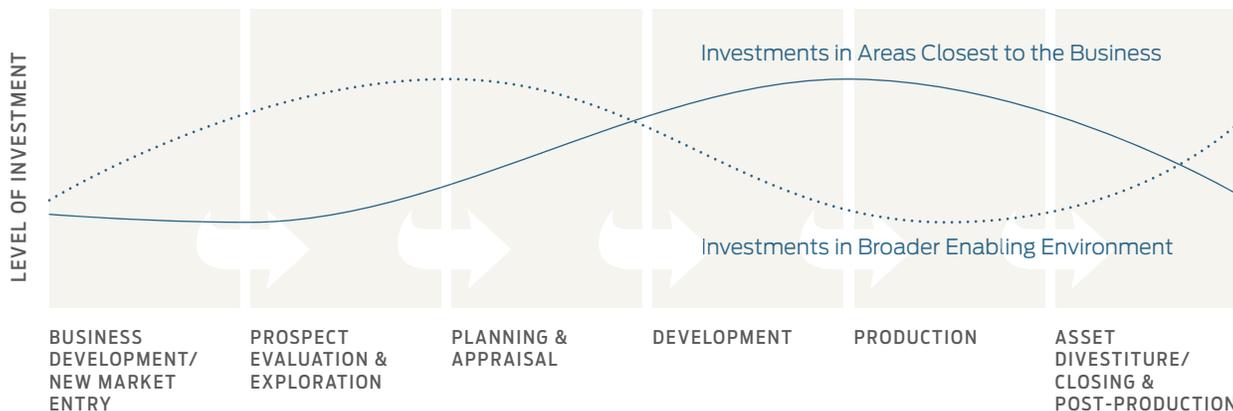
if a community cares deeply about an issue that delivers only marginal business value, it may nevertheless make sense to prioritize that investment to set the stage for other investments down the line. But using this framework can help identify opportunities that are meaningful to the business, address a societal need sustainably and for the long term, and capitalize on opportunities for collaboration. The opportunities for shared value creation will be most evident for those activities closest to the business, such as supplier and workforce development. Traditional cluster development activities also may surface more naturally. But long-term business benefit may lie in the harder work of creating prosperity in host communities.

Prioritizing over the Timeline of a Project

Selecting the type of investments that make the most sense also depends on the stage of the project. The most relevant social investments early in the exploration phase may not necessarily be those with the most direct connection to the business. In the short term, building trust with the local community and investing in “quick win” projects may become more of a priority than developing shared value strategies. Investments in sector-specific workforce or supplier development programs may make little sense unless there is some degree of certainty that the company will develop a project to employ the workforce and contract with the suppliers.

In many situations, however, shared value investments during exploration can set the stage for more successful project development down the line, and investing early is critical to generating business value. Even during exploration, having a long-term view of what is needed to foster an enabling business environment and generate societal impact can help guide social investment decisions. Given the uncertainty of the exploration phase, companies should first consider shared value investments that can foster the broader enabling environment and be sustained if exploration is unsuccessful and the company exits. As exploration advances and the likelihood of a project increases, investments should begin to shift toward those areas that are closest to the business (e.g., building local markets for intermediate products, improving local workforce capabilities, improving the utilization of water, energy, and other resources), building on the earlier investments in the broader enabling environment. As production winds down and the asset begins to move into the closure phase, it may again make sense to shift investments toward the broader enabling environment to ensure that the community has alternatives to extractives for economic development. While the specifics of each circumstance will dictate which investments make the most sense, the following chart illustrates a notional pattern of investments during different phases of the project.

SHARED VALUE INVESTMENT PATTERNS OVER THE LIFETIME OF A PROJECT



Part 4: Four Challenges That Deter Shared Value

The examples cited in the previous section demonstrate how extractive companies are accruing meaningful financial and business benefits through shared value initiatives.

Given all that, why is progress so difficult?

The research for this report demonstrates that four interrelated and entrenched challenges inhibit creation of shared value:

Inadequate Organizational Structures and Behaviors:
Organizational designs prevent the identification of shared value opportunities.

Incomplete Measurement of Cost and Benefit:
Companies cannot accurately size shared value opportunities.

Low Motivation for Collaboration:
Collaboration often is seen as a hindrance and at odds with reputational objectives.

Lack of Alignment with Government:

Local, regional, and national governments can promote shared value effectively, but often they do not. While companies cannot and should not replace government, they can strengthen their own ability to create shared value by helping to build local, regional, and national capacity for effective governance.

The following examples reveal these barriers as well as ways that companies mitigate them.

CHALLENGE #1: Organizational Structures and Behaviors



Companies understand the potential for positive societal impact and their role in creating societal change. With only two exceptions, the 26 companies analyzed for this study all described the links between their business, society, and the environment as critical to company success in their vision statements or sustainability reports, but most companies struggle to convert these vision statements into tangible outcomes on the ground. At the root of this challenge is a deep philosophical and structural division between operational and societal issues. The research revealed that this division can manifest itself in several ways.

- Organizational structures often separate operations staff from social engagement staff, siloing social engagement professionals in functions or business units that are not core to operations and limiting their

ability to understand and influence operations staff, and vice-versa.

- Operations staff often have a limited understanding of social engagement priorities, and social engagement teams often do not incorporate business drivers into program prioritization.
- Business and social performance are reported separately, by different teams and on different cycles. Financial reports acknowledge the risk that societal issues can cause for the business, but companies document how they interact with communities and government in sustainability reports, further reinforcing the structural separation.
- Investments in societal issues are difficult to quantify or measure. Because of this, companies accustomed to highly sophisticated measurement processes may

OVERCOMING ORGANIZATIONAL BARRIERS TO SHARED VALUE

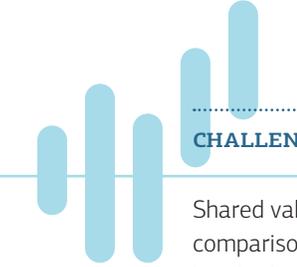
Issue	Approach
Organizational structures limiting interaction between business and social functions	Anglo American's local procurement framework names a local content champion and brings together specialists inside the supply chain function but also incorporates social performance, government affairs, communications, enterprise development, and other relevant functions to define local content strategies.
Limited cross-company understanding of both business and societal issues	Rio Tinto has created an internal Stakeholder Engagement Academy that trains project managers as well as stakeholder engagement professionals, noting that enhancing stakeholder engagement skills across the organization is central to delivering projects.
Separate reporting for business and societal performance	In its 2013 Integrated Annual Review, Gold Fields has taken a positive step to provide a comprehensive view of the operational and societal performance of its business. The report includes "securing our future responsibly" as one of three pillars of company strategy and features sections on creating and distributing value as well as the SLTO.
Perceived lack of rigor for social engagement functions	Shell recently has made social performance a technical discipline, treating it with the same rigor as other technical disciplines within Shell such as environment and safety. Practically, this means that social performance has a presence at the leadership team level, signaling the function's importance to the business.
Beyond safety, societal dimensions not included in compensation	Although social metrics are not yet incorporated, Suncor factors environmental considerations into company goals, and compensation is influenced by meeting those goals.

perceive such investment as less rigorous or professional. Consequently, societal issues can be treated as less of a priority than technical functions.

- Beyond safety, compensation often does not incorporate societal dimensions.

These divisions between operational and social functions carry real consequences in limiting companies' ability to create shared value. Understanding the intersection between societal and business opportunities is crucial to developing shared value, and yet companies – intentionally and unintentionally – have created barriers to that understanding by restricting cross-business learning and deprioritizing social engagement functions relative to other technical specialties.

Some companies have taken steps to address these divisions. These examples are in many cases nascent and their effectiveness has yet to be proven, but they are proactive efforts to link business and societal issues more closely. The table above lays out how companies have started to address these organizational challenges. The examples are not perfect – for instance, Gold Fields' Integrated Annual Review stops short of quantifying the business and societal outcomes of its shared value strategies – but they illustrate how, through several corporate structures and processes, societal and business functions can be more closely linked.



CHALLENGE #2: Measurement and the Inability to Quantify the Opportunity

Shared value strategies can suffer from materiality comparisons, particularly when companies are investing hundreds of millions of dollars in projects. As this report has highlighted, however, shared value programs can deliver real value to the business.

Three changes in measurement strategy could make the case for shared value much easier.

- **Measuring the business benefit:** This report has shown real examples of tangible business value, as shown in the chart below. These examples remain the small exception to the rule, however, in part because of the way in which some of the shared value initiatives start. The BP enterprise development program in Azerbaijan, for example, began as a social investment; its priority was to track societal outcomes. BP believes that the program delivers business value, but after training 121 small and medium enterprises, the company cannot say with certainty how much savings the program generated for BP's \$1 billion local procurement budget in Azerbaijan.
- **Accounting for the full benefits and costs:** Often, even when businesses measure some direct dollar benefits

and costs of a shared value initiative, they fail to capture their full true value. The AngloGold Ashanti malaria program, for instance, calculated the hard savings from reduced treatment, but it did not measure the savings from the 88,000 fewer person-shifts lost to malaria (e.g., from productivity increases, decreases in overtime salaries, turnover). Those benefits could be several times larger than the direct benefits from reduced medication costs.

As with benefits, costs are also often underrepresented. Veolia, a leader in water and wastewater services, has compiled an illustrative example of the full cost of water based on its research. Companies typically understand the physical cost of obtaining freshwater and the infrastructure required to deliver it, but they do not account for hidden costs, including such factors as increases in cost of capital,^{xiii} the costs of water shortages, and the risk of a reduced water allocation due to disputes. Veolia has found through its work that the full cost of water can be several times the direct cost of freshwater and infrastructure. Understanding the full costs and benefits that a project could deliver is an important component in making the case for shared value.

- **Understanding the opportunity costs:** A local content program that develops competitive suppliers can be expensive and have a long-term time horizon. On the other hand, not developing a competitive local supplier base in the face of local content requirements can carry a large hidden financial cost. Understanding the full financial implications of choosing not to invest in a shared value strategy can help make the case for the program.

Some organizations have developed tools to help companies estimate the financial impact of their investments. The IFC's Financial Valuation (FV) Tool is one resource companies can use to begin valuing their shared value investments. The FV Tool allows companies to capture the full financial costs and benefits of broad sustainability initiatives and calculates the net present value of a portfolio of activities. Newmont, Cairn

BHP BILLITON

→ **\$121M** in cost savings from supplier development program

ANGLO AMERICAN

→ **60%** of costs of water reclamation facility offset through shared value strategy

PACIFIC RUBIALES ENERGY

→ Byproduct treatment costs reduced by **20%** by re-purposing water used in production process

ANGLOGOLD ASHANTI

→ **88,000** reduction in person-shifts lost to malaria

^{xiii} Veolia is not the only company that believes water is undervalued: Moody's Investors Service announced in 2013 that it expected to begin placing greater analytical emphasis on rated mining companies' environmental policies and risk management practices related to water in its credit assessments (Metcalf 2013).

Energy India, and Rio Tinto, among others, have used it to measure the impact of their activities. Although it relies primarily on user-entered information to quantify benefits, it provides a useful framework for companies to evaluate projects. Companies that have used the tool, which is publicly available from IFC, have identified potential direct and indirect benefits of societal investments of several million dollars.⁵⁸

PWC has developed a Total Impact Measurement and Management (TIMM) Framework to help companies understand the overall impact, both positive and negative, of their activities. The Framework has broken out four dimensions of impact: economic impact via employment and economic output; social impact via effects on health care, education, and livelihoods; impacts on the environ-

ment such as land and water use; and tax, or the overall financial contributions to public finances.⁵⁹ Tools such as TIMM give companies powerful ways of expanding how they think about the total business impact of their investments.

On the societal side, Canadian mid-tier gold producer IAMGOLD is leading a consortium of companies and NGOs that is developing a framework to measure and report on the health of communities with extractives operations.^{xiv} The framework will include core indicators of wellbeing, along with definitions for those indicators to ensure consistent measurement. The framework also will include a process to define, together with the local community, site-specific indicators that are particularly relevant to that community.⁶⁰

CHALLENGE #3: Low Motivation for Collaboration

To solve the root causes of societal issues in communities in which companies operate, true multilateral collaborations in which all relevant actors share their expertise and resources are critical. Yet companies often find partnering very hard for a number of reasons: misaligned goals among potential partners, difficulty in maintaining momentum, concerns about anti-trust issues, and the desire for reputational gains.

Considering the opportunity to generate more business and societal impact while sharing the costs of investment, however, one would expect to find many examples of collaboration among oil and gas and mining companies. Yet such partnerships continue to be fairly rare and are often more symbolic than substantive.

Company leaders make excuses for not partnering more. Some explain that competition gets in the way. Others clarify that they are reluctant to share the positive reputational impacts with partners. Still others complain that they cannot rely on other companies when no enforcing mechanism exists. Companies also point to the loss of competitive advantage that could result from collaborative investments in the enabling environment. For instance, the wisdom of contributing resources to

develop a qualified local workforce that others also can access could be questioned. Pre-competitive collaborations, however, can be a powerful tool to solve business-critical issues. Using a pre-competitive partnership to improve performance in areas of common interest, and then using core company capabilities to convert these investments into true competitive advantage can occur in a number of ways, as the chart on the next page illustrates.

One example of a successful pre-competitive collaboration to increase local procurement opportunities comes from the Centro Apoio Empresarial (CAE) in Luanda, Angola. The CAE was established by several extractives companies (including the Angolan state-run company, Sonangol) in collaboration with international NGO CDC Development solutions, to promote the participation and sustainable development of small and medium enterprises (SMEs) in the Angolan oil industry. Founded in 2005, the program has realized significant results in building the industry cluster: in its first two years of operation, the CAE trained approximately 547 participants.⁶¹ By 2011, more than 1,500 Angolan-owned businesses had participated in the program through training and technical assistance and the program had generated more



xiv Participants in the framework's development include five other multi-national mining companies, five major Canadian NGOs, two academic experts, and the consulting firm rePlan.

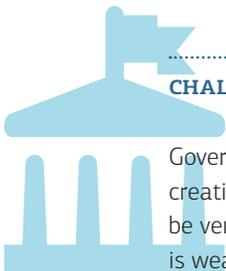
TURNING PRE-COMPETITIVE COLLABORATION INTO COMPETITIVE ADVANTAGE

	Pre-competitive Collaboration	Competitive Advantage from Pre-competitive Collaboration
Workforce Development	<ul style="list-style-type: none"> • Both to bolster the cluster and to create broader economic diversification in the area: <ul style="list-style-type: none"> - Improve primary/secondary education in host communities - Create skills training programs/centers 	<ul style="list-style-type: none"> • Create recruiting pipelines from schools and training programs/centers • Develop recruiting and retention programs to become employer of choice
Enterprise Development	<ul style="list-style-type: none"> • Both to bolster the cluster and to create broader economic diversification in the area: <ul style="list-style-type: none"> - Fund entrepreneurship programs - Establish business incubators - Create financing vehicles for SMEs 	<ul style="list-style-type: none"> • Identify most promising opportunities for local content within company supply chain and share with training centers
Health Care	<ul style="list-style-type: none"> • Develop programs to tackle endemic diseases in areas/countries of operations • Support training programs to build capabilities of local health care workers 	<ul style="list-style-type: none"> • Differentiate from competitors by offering high-quality access to health care (e.g., through insurance, access to health care workers) to employees and families
Environment	<ul style="list-style-type: none"> • Jointly develop technologies that reduce the environmental impact of the sectors, reducing costs and external pressure on the industry 	<ul style="list-style-type: none"> • Implement the new environmental technologies in the most cost-efficient way and continue to innovate to improve them

than \$214 million in oil industry contracts while supporting the creation of more than 2,700 Angolan jobs.⁶²

Successful collaboration requires not only that each participating organization see value in the work, but also that the partnership's structure supports ongoing engagement. A key feature of the successful COSIA

collaboration referenced earlier is a governance system that equalizes member contributions. Contributions, both financially and in terms of human resources, are monitored and levelled out at year end through a reconciliation process. This process encourages participants to commit meaningfully to the innovation process and ensures that no one organization receives a free ride.



CHALLENGE #4: Relations with Government

Governments – local and national – play a critical role in creating shared value; indeed, creating shared value can be very difficult in situations where government capacity is weak. While it is not appropriate for companies to assume responsibilities that rightfully belong to the government, companies and other organizations can play a role in helping to build the capacity of local and national governments. This requires companies to take action to shift the current dynamic between the corporate and public sectors from one that views extractives compa-

nies as contractors who pay for the privilege of carrying out extraction to one that sees these companies as development partners who can help solve societal issues of concern to government.

Companies can achieve this transition in two ways: through direct engagement with local, regional, and national governments and communities and through indirect support for independent, third-party efforts to build capacity.

Building Local Governance Capacity

Chevron's development of a General Memorandum of Understanding (GMOU) approach in the Niger Delta is a good example of how a company can directly engage in building local governance and decision-making capabilities while delivering value for the business via reduced risk and a stronger operating environment.

Over the last 20 years, violence and ethnic conflict across the Niger Delta have led to safety concerns for both local communities and the staff of extractive companies. Regional unrest and attacks on foreign workers and pipelines caused Nigerian oil production to slip by 18 percent – from 2.3 million barrels to 1.9 million barrels per day – between 2005 and 2008, which translated into tens of millions of dollars in lost revenues.⁶³ Chevron, which operates in Nigeria through a 40 percent stake in Chevron Nigeria Limited (CLN) in partnership with the Nigerian National Petroleum Corporation (NNPC), recognized the need for a new approach to community engagement and development. In 2005, the company adopted the GMOU process to create a structure by which communities, local governments, and Chevron operations could work collaboratively with each other and at the same time effectively engage governments and other stakeholders.

As a first step, Chevron conducted a stakeholder analysis to understand ethnic rivalries and community needs and engaged more than 450 local communities and relevant local governments. After nearly 18 months, Chevron successfully negotiated agreements to develop eight Regional Development Committees (RDCs), which are made up of an elected set of community members as well as participants from Chevron Nigeria Limited, the state government, the Niger Delta Development Commission, and local NGOs.⁶⁴ RDCs are tasked with designing three-year community investment plans and the members decide where and how to spend community donations from Chevron. Chevron also has designed a financial management system that ensures financial transparency and accountability.

By bringing together a diverse set of community members and stakeholders, RDCs have helped to shift the dynamics between the company and community as well as among communities themselves. The RDCs have the

power to attract additional external funding. The GMOU process has also built local people's capacity to take on roles and develop new skills that have the potential to carry over into employment opportunities.⁶⁵

From a company perspective, the effects have been positive. Community-led disruptions to Chevron operations dropped from 81 in 1998 to 11 in 2011 to zero in 2012, leading to significant costs savings for the company. While other factors outside of the GMOU structure contributed to the improved environment, Chevron believes that GMOUs deserve much of the credit. According to Deji Haastrup, General Manager at CNL, "GMOUs create an enabling environment for the company to do its business and provide avenues for communities to develop themselves and create social impact in the community." By creating a platform for communities to debate, discuss, and agree on their priorities, GMOUs now serve as a vehicle for addressing broader societal issues and discouraging theft and vandalism.⁶⁶

Building Regional and National Government Capabilities

While companies can play an important role in directly addressing some public sector challenges, such as resource nationalism or underdeveloped regulatory frameworks to govern resource extraction, there are also situations where companies find it politically difficult, inappropriate, or unwelcome to engage directly with national governments or to attempt to influence their behavior. In these situations, a credible, trusted, neutral body can help facilitate engagement in an independent and impartial way. This body can help ensure fair, balanced, and productive exchanges between different parties and can help implement effective governance procedures for longer-term or more complex interactions.

The ICMM's Mining: Partnerships for Development spotlight series provides an example of an effective third-party capacity-building initiative. The purpose of this initiative is to understand why some countries are able to leverage mining into broader development benefits while others are not.⁶⁷ In this collaboration, the ICMM plays a critical role as both a convener and conduit for the sector to engage with a broader network

of partners that have an interest in solving development challenges.

In one study in the series, the ICMM analyzed the role of resource nationalism in Zambia and the potential to enhance mining's contribution to the Zambian economy and society.⁶⁸ The analysis includes an assessment of the governance mechanisms that apply to resource

management. By identifying areas for development – such as the absence of reliable economic and social data to inform government decision-making – the ICMM developed a series of practical recommendations for government to maximize the benefit of resource investment for the Zambian population. It is up to the government to move forward with the recommendations.

How Governments Can Help Promote Shared Value

Governments have the responsibility to regulate the sectors and develop policies and frameworks to govern the activities of the extractives sectors. Governments also have an important role to play, however, in shifting the dynamics between the extractives sectors and the public sector from a contractor model to a development partner model. The first step is for all levels of government – national, provincial, and local – to agree on priorities for development and the roles of the sectors, and to give clear guidance to the sectors on their expected role in helping to address these priorities.

National governments can help companies create shared value in two ways.

1. CREATE ENABLING POLICIES AND

REGULATION: Governments can encourage shared value adoption and avoid policies that create challenges to shared value creation (e.g., regulations that require companies to make social investments in areas outside of their core business, regulations that require that unrealistically high percentages of local content go to the local economy). Generally, regulations that focus on the level of financial investment with

little regard for outcomes make it more difficult for a company to create shared value.

To guide individual companies towards shared value strategies, governments can take actions such as setting a clear national development agenda, signaling the ways in which companies in the extractives sectors can contribute, and incorporating shared value principles into concession agreements.

The National Hydrocarbons Agency (ANH, after its Spanish initials) in Colombia is an example of a regulatory entity that promotes shared value creation through its regulatory framework. Colombia requires that companies that are granted exploration and production licenses invest one percent of the value of the contract into social programs. The specification of one percent is a source of contention between the government and the companies in the sectors. Setting the required investment level aside, however, companies have broad flexibility in determining how to best invest the funds.

Under a law signed in 2011, ANH laid out broad parameters for how companies must

Another avenue companies can pursue, in partnership with other third-party organizations, particularly in nations with new or evolving regulatory frameworks for the sectors, is to help foster inter-country government links with countries that have established regulations. The World Bank and the International Monetary Fund assisted Mongolia, for instance, in linking its government

with the Chilean government to give Mongolia insight into how the Chilean regulatory framework functioned. The exchange led to several changes to Mongolian laws, including a fiscal stability law.⁶⁹

develop these social programs, but left it to the company and local community to define specific programs for government approval. As well as mandating that projects follow the requirements of international law and the priorities already agreed in municipal development plans, the law requires the participation of local communities to help decide how best to invest that money in the community.

2. SPUR COLLABORATION: Research has shown that governments can play four key roles with companies to encourage collaborative behavior within the sectors.

- **ACT AS A KNOWLEDGE BROKER:** Governments can conduct and help sponsor research that improves shared value potential, such as technical research or research into societal issues, establishment of baseline data, identification of best practices, and measurement of progress against the baseline.
- **SERVE AS A CONVENER FOR INTERESTED STAKEHOLDERS:** Governments can convene interested stakeholders whose participation is needed to solve a given issue and encourage



the creation of in-country coordinating mechanisms to support community resilience initiatives.

- **ACT AS AN OPERATING PARTNER FOR SHARED VALUE STRATEGIES:** Governments can create greater societal value by partnering with companies in the implementation of shared value strategies where government may have specific expertise or resources to bring to bear.
- **INCENTIVIZE SHARED VALUE INVESTMENTS:** While companies may believe that some investments deliver value, the risk tolerance needed to justify investment may be beyond some companies' thresholds. Governments can alter the level of risk through loans, subsidies, tax breaks, and co-investments in shared projects, helping to leverage funding they may be allocating to community development and making shared value strategies more attractive to companies.

Shared Value in the Broader Societal Engagement Agenda

Shared value is not the only touch point between companies and society. It is part of a broader set of activities through which companies and society interact. This portfolio of activities is driven by different motivations, which include compliance with regulatory or concession requirements, operational performance, and community contributions. As the table below shows, these activities can help create conditions that enable shared value or support shared value programs, but their primary purpose is different.

Each category is critical to a company’s long-term success. For example, a company that fails to satisfy local content requirements risks jeopardizing its relationship with the host government. Accidents with negative environmental consequences can jeopardize a company’s credibility and erode trust. Companies require the strong execution of core business activities to succeed.

There are two important considerations to keep in mind regarding these different touch points with society, however.

- Thinking about each of these touch points in isolation can result in a series of disjointed short-term strategies that do not create the greatest business and societal value. Understanding the broader impact of the full portfolio of activities and identifying how those activities can complement each other can help maximize the value of the activities.
- As the table below illustrates, there may be opportunities for investment in shared value within each touch point. Taking a shared value mentality when defining activities for each area can help to migrate the entire portfolio toward greater shared value over time.

SHARED VALUE IN THE BROADER SOCIETAL ENGAGEMENT AGENDA

Motivation	Description	Link to Shared Value
Operate safely	Establish employee and environmental practices that protect the safety of workers and the environment	Poor operational practices can affect a company’s legitimacy and reduce its ability to engage with others to solve societal issues
Operate with minimal impact	Reduce environmental and social impacts of operations, including gas flaring, air pollution, road use, waste disposal, and others	Reducing the impact on areas in which companies operate not only constitutes responsible business practice but also can increase community and government support for the company
Operate sustainably	Strive to minimize or eliminate the environmental impacts of operations	Reducing inputs needed for operations, creating markets for intermediary products (e.g., water used in production), or reducing the costs of waste disposal or site closure can all create shared value
Comply with concessions and regulatory requirements	Fulfill investments in host countries and communities as specified in concession agreements or required by regulation on local content	Taking a shared value approach to complying with concession or regulatory requirements could deliver business value beyond compliance, particularly in improving the wider community and business infrastructure
Contribute voluntarily to local communities	Invest in issues of importance to local communities via social investment	Community investments can help build trust, reinforcing some of the conditions necessary for shared value; they also can help support shared value strategies

Conclusion: The Next Competitive Advantage

As this report has described, companies around the world are creating shared value today. These companies are taking a different approach to engagement with communities, moving away from minimalist transactional relationships with governments and communities. Leaders have taken a long-term approach in thinking about how to create meaningful, positive societal impact in places where they operate, and they have understood the positive financial impact of these strategies for their businesses.

The four challenges to shared value – the organizational, measurement, collaboration, and government challenges – present real and difficult problems for companies seeking to embrace a shared value approach. Progress against any one of the challenges can take significant resources and time, and it can be difficult to maintain momentum. Articulating a vision for the future of a company across these challenges can be difficult. But companies can take steps to begin embedding shared value across the organization by changing their approaches to societal issues and the organizational dynamics that reinforce that approach. They can begin to measure outcomes rather than outputs. And they can proactively seek to collaborate with governments, NGOs, competitors, and other stakeholders.

Innovative approaches to overcoming the internal and external challenges to creating shared value are emerging. Companies are changing structures to elevate and further professionalize social performance functions. Measurement tools, while imperfect, exist and companies are improving them. While few in number, examples of collaborations – among companies and across diverse stakeholders – also are emerging. And while relations between companies and governments in many cases remain problematic, in some instances both sides are embracing new, collaborative approaches.

Companies are also experimenting with strategies targeted at the broader business environment that affects company performance. Although it is too early to

evaluate the effectiveness of initiatives such as Social Prosperity Wood Buffalo or Partnership Initiatives in the Niger Delta, their existence demonstrates that companies are willing to think about social prosperity and its impact on the business differently, and they are taking risks to try new approaches.

It is not enough.

The changes needed are difficult to incorporate at a company level, and engaging externally is even more difficult. Changing how some of the biggest companies in the world operate is no easy task. But the current approaches will not be sufficient to train the workforce needed to exploit the Marcellus Formation in Pennsylvania, nor address the gaps in educational attainment and income levels the local population faces. Rio Tinto on its own cannot become the single de-facto development agency for Mongolia to support its Oyu Tolgoi project. Nor will the Papua New Guinea LNG project succeed without an enabling regulatory environment. The challenges described in this report will not be solved by a small cadre of dedicated social engagement staff sitting outside of core business functions. The current state is challenging, and the situation is likely to become worse. Change, as difficult as it may seem, is needed. A roadmap that companies can follow to advance shared value is presented on the following page.

Traditional determinants of success in the sectors (e.g., technology, access to finance) are eroding, and the

ROADMAP TO ADVANCE SHARED VALUE

Element	Business as Usual	Early Progress	Embedded Shared Value
Approach to Societal Issues	<ul style="list-style-type: none"> • Emphasis on short-term risk mitigation • Reputation/social license to operate (SLTO) perceived as primary outcome 	<ul style="list-style-type: none"> • Some understanding of underlying causes of risk • SLTO seen as a barometer rather than an outcome 	<ul style="list-style-type: none"> • Programs designed to address root causes of societal needs • SLTO seen as a byproduct of successful program implementation
Organizational Dynamics	<ul style="list-style-type: none"> • Social Investment teams isolated from the business • Incentive structures do not factor in societal issues • Lack of fluency on overlap in business and societal issues • Societal issues not part of core company values 	<ul style="list-style-type: none"> • Some cross-functional interaction to develop one-off programs • Societal issues included in planning for all project phases • Emergence of a cadre of business/societal experts • Development of tools to broaden overall awareness 	<ul style="list-style-type: none"> • Project planning includes hand-off on societal issues between project phases • Societal issues integrated into roles across the business • Deep expertise and understanding of issues at the intersection of business and society exists across the organization
Measurement of Outcomes	<ul style="list-style-type: none"> • Measurement confined to financial contributions • Societal outcome of programs not evaluated 	<ul style="list-style-type: none"> • Baseline data tracked and key societal needs identified • Measurement systems established to track outcomes 	<ul style="list-style-type: none"> • Programs include robust measurement of business and societal outcomes • Company can articulate contribution to societal needs
Approach to Collaboration	<ul style="list-style-type: none"> • Partnerships limited to contractor relationship with NGO implementers 	<ul style="list-style-type: none"> • Pilot collaborations developed with one or two others • Model for collaborations developed 	<ul style="list-style-type: none"> • Company catalyzes several broad partnerships to address societal issues in host communities and countries
Approach to Government	<ul style="list-style-type: none"> • Reactive response to regulation • Emphasis on meeting requirements, not building business value 	<ul style="list-style-type: none"> • Programs designed in anticipation of regulation • Business benefit sought from programs put in place to comply with regulation 	<ul style="list-style-type: none"> • Company/Government/NGO/ Industry Association round tables established to draft constructive policies and regulation

engineering expertise that once gave companies an advantage is now more widely available. In the future, the key stakeholder will become the resource holder. Companies that can demonstrate to host governments and communities that they can simultaneously extract resources and build communities will gain the competitive advantage.

All actors can contribute to strengthening the shared value model. There are immediate steps all can take to accelerate the journey, ranging from individual actions to broad, pre-competitive collaborations to build the field's knowledge base. Such steps are necessary to shift the sectors from one-off examples of compelling initiatives to full-fledged, sector-wide shared value adoption.

The Way Forward

This report has focused on the role of companies in creating shared value in the extractives sectors, and the table on the previous page shows how they can begin to adopt shared value more holistically within the company. But companies act in a broader context that includes other stakeholders such as NGOs, local and national governments, sector and industry associations, investors, and of course host communities. Every actor has a broader role to play in promoting shared value: sector and industry associations can become centers of excellence for shared value, and disseminate best practices to their members. Governments can put in place policies and regulation that encourage companies to create shared value. NGOs can balance holding sectors accountable with engaging them constructively to advance their mission.

Beyond these overarching principles, each actor can contribute to creating shared value through the following critical next steps.

1. Seize current opportunities in workforce development and local supplier support

- **Companies:** Those that currently are investing in local content or local workforce development programs should optimize the existing shared value opportunities of these programs. They should put a monetary value on the long-term business benefits of developing a local workforce and supplier base, the premium

to source locally from uncompetitive suppliers, and the cost of relying on expatriate workers.

- **Governments:** Governments can work with companies in the sectors to develop local content regulations that are technically and economically feasible. Those that have local content regulations should incentivize companies to create competitive local suppliers and workers. They should set sustainable, quality employment – within and outside of the sectors – as the goal, rather than input metrics such as number of jobs created or enterprises supported. They also should align government investments with company needs and vice-versa to obtain as much complementarity as possible.
- **Sector and industry associations:** Associations should form working groups, in collaboration with member companies, that identify the strongest shared value case studies, conduct research to understand the workings of programs that have delivered meaningful business and societal value, develop toolkits to support practitioners, and encourage members to adopt best practices.
- **NGOs:** NGOs can position themselves as trusted brokers between communities and companies and can proactively engage with companies and host communities to create shared value programs. NGOs should also recognize that companies have a legitimate objective to seek profitability, and help companies recognize opportunities to address societal issues as part of their profit objective.

2. Develop pre-competitive collaborations to target areas of sector-wide focus:

- **Companies:** Companies should make pre-competitive collaboration work. Partnering is fundamental to core business practices for both sectors, and companies execute successful joint ventures to reduce project risk on a routine basis. The same approach needs to be taken to address societal issues. These collaborations can happen in places where footprints overlap or at a country, regional, or global level. Without these collaborations, the ability to create shared value is limited.
- **Governments and sector and industry associations:** These should serve as conveners and facilitators for sector-wide collaborations. Trusted outside bodies can

be critical to jumpstarting collaborations. In addition to serving as conveners, governments can create policies and regulations that promote collaboration.

3. Develop measurement tools for shared value approaches to demonstrate tangible societal and business outcomes:

- **Companies:** Firms should work independently and collaboratively to create shared value measurement tools and share data on successful measurement practices to encourage widespread adoption. They should also continue and expand participation in collaborations to develop effective measurement practices. Measurement is critical to understanding the financial and societal impact of shared value strategies, and it is needed to strengthen the case for shared value.
- **Multilateral organizations and sector and industry associations:** These organizations should make measurement a central part of the agenda for the coming years. They should continue to advance existing efforts, such as IAMGOLD's framework and the Social Progress Imperative's Social Progress Index^{xv} on the social side. They should also continue to facilitate the development of tools for measuring the business benefit, including efforts such as IFC's FV Tool. Finally, they should expand, refine, and further define the suggested business metrics included in this report.
- **NGOs:** NGOs can share best practices in measuring societal outcomes with the extractives sectors. They can share evaluation expertise to enable companies to measure the societal returns of their investments and act as service providers to measure companies' societal progress. They can work with companies to identify the societal impact measures that are most relevant to the business. Finally, NGOs can continue to monitor extractives companies' adoption of and commitment to shared value.
- **Investors:** Investors can incorporate environmental and social activity – and its impact on financials – into their valuations. They should demand that companies report against societal indicators that affect financials, not only against those that are part of voluntary

sustainability reporting standards. Finally, investors should bet that companies that invest in shared value will outperform their peers in the long term.

To execute these three priorities, all actors need to enhance their capabilities. Companies need to make social performance functions as relevant and influential as traditional technical functions. Social professionals in the extractives sectors need the same authority as technical functions to steer project decisions. Societal issues need to be a part of the training agenda for all employees, not only those in front-line community roles. And those in community roles also need to receive training on business issues, to enable them to spot shared value opportunities.

The above set of recommendations will not be easy to execute. As the report has demonstrated, however, progress is happening. The commitment from many stakeholders exists. And the long-term health of the sectors, as well as the communities and countries in which they operate, depends on finding shared value solutions.

xv. The Social Progress Imperative is an organization whose mission is to advance global human wellbeing by combining national social performance and capacity indicators. It does this partly through its Social Progress Index, which measures a population's access to basic needs, such as food, shelter and security, healthcare, education, and a healthy environment with the goal of informing conversations about development.

Appendix A: Methodology

This report focuses on how large, publicly traded multinational companies (MNCs) in the oil and gas and mining and metals sectors can simultaneously and sustainably improve societal outcomes and deliver business value in their upstream operations. While FSG recognizes the important differences between the oil and gas and mining and metals sectors, their common characteristics – including frequent interaction with local communities, legal requirements governing investments in societal issues, massive inflows of capital to local economies, and the long-term time horizon for operations – have led to similar challenges and missed opportunities, indicating that each sector can learn from the other’s successes and failures.

The products and services of the industry deliver value to society and make modern living standards possible. There is opportunity to continue to innovate and create shared value throughout the downstream activities of the industry, and many societal needs are associated with downstream products (e.g., access to energy, renewable energy). The focus of this report, however, is on upstream activities – that is, those that take place at or near the point of extraction. This focus was chosen because of the scale of the missed opportunities for both business and societal value and because of the transactional and often adversarial relationship that exists among companies, host communities and countries, and other stakeholders.

The report draws on a comprehensive review of nearly 200 publications and interviews with more than 150 experts representing extractive companies, academia, governments, nonprofits, and other stakeholders. FSG also conducted on-the-ground research and site visits in Canada, Chile, Colombia, Malaysia, Nigeria, Oman, Peru,

Qatar, the Philippines, South Africa, and the United Arab Emirates. To understand the current state of the sectors, FSG reviewed publicly available information for a sample set of major companies in each sector (14 companies with annual revenues over \$100 billion in oil and gas and 12 companies with annual revenues over \$18 billion in mining and metals), and additional companies identified as leaders in the sectors via our research. Unless publicly traded, National Oil Companies (NOCs) were not explicitly included in the research, as the purpose and objective of many NOCs are different than those of the private sector, and access to information can be more difficult. Finally, large suppliers to the sectors were not a specific focus of the research, although some examples included here highlight the role they can play in developing shared value strategies.

INTERVIEWS CONDUCTED BY SECTOR (n=169)	
Oil and Gas Industry	25%
Mining and Metals Industry	18%
NGOs	18%
Governments	12%
Industry Associations	7%
Finance	5%
Academia	5%
Others*	9%

* “Others” include multilaterals, industry consultants, media, and other stakeholders

**SAMPLE SET OF MAJOR COMPANIES
REVIEWED FOR RESEARCH**

Oil & Gas (Revenues > \$100B)	Mining & Metals (Revenues > \$18B)
Royal Dutch Shell	GlencoreXstrata
Exxon Mobil	ArcelorMittal
Sinopec-China Petroleum	BHP Billiton
BP	Rio Tinto
PetroChina	Vale
Total	China Shenhua Energy
Chevron	Anglo American
ENI	Jiangxi Copper
Petrobras*	Alcoa
Gazprom*	Aluminum Corp of China
JX Holdings	Hanwa
Statoil*	Freeport-McMoRan Copper and Gold
Lukoil	
SK Holdings	

* NOTE: NOCs included when publicly traded but otherwise beyond scope of study

The scope of the research includes all aspects of the sectors' upstream business activities, as well as elements of their enabling environment, such as government regulations and the influence of civil society. Much of the research contained in the report focuses on emerging economies, but the analysis also includes examples from first world communities such as Fort McMurray in Alberta, Canada.

Case studies highlighted in this report are not meant to be exhaustive of all activity in the sectors. They were selected to represent the breadth of thematic areas, type of operations, geographies, and company sizes where shared value can occur. Individual case studies are highlighted as best practices and do not reflect a blanket endorsement for all of the company's activities. Few – if any – companies in the sector have an unblemished societal record. We still can learn from best practices that do exist.

Eight companies in the extractives sectors – Chevron, Gold Fields, Hess, Newmont, Pacific Rubiales, Rio Tinto, Shell, and Suncor – have helped fund this research. Mercy Corps and the International Finance Corporation (IFC) also have provided support. The authors of the report, however, maintained complete objectivity in selecting case studies and articulating points of view. The authors are completely responsible for the opinions and ideas in this report.

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