



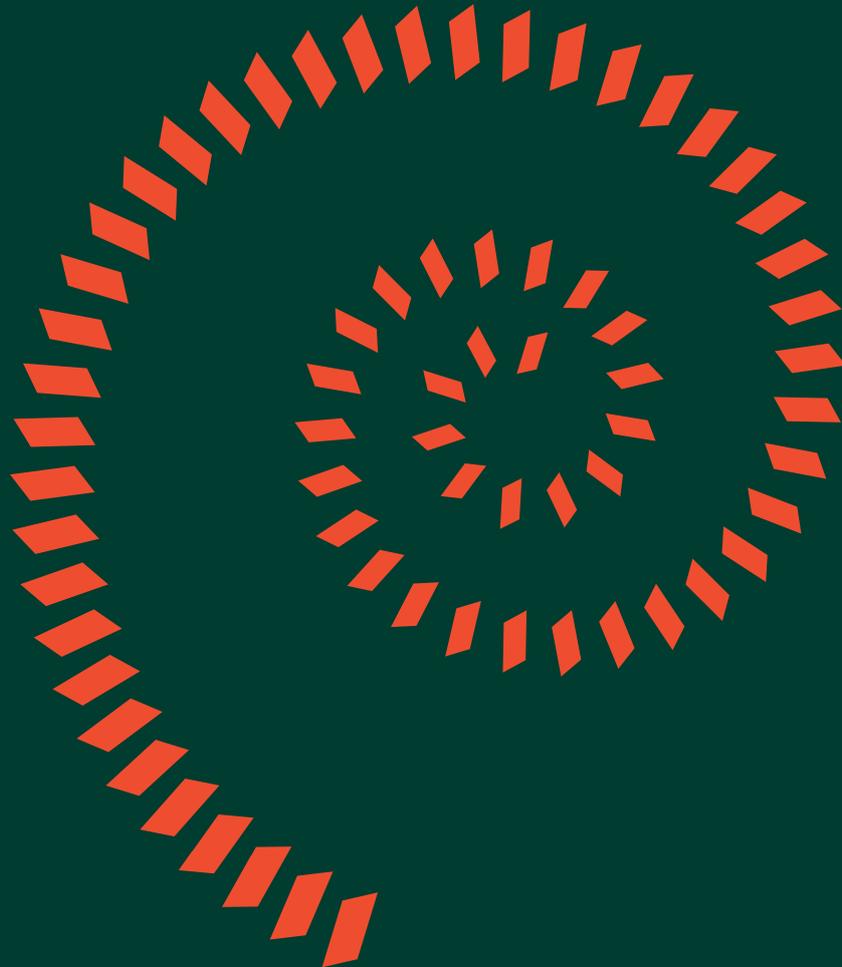
**MARS**



**Economics  
of Mutuality**

# LafargeHolcim

An Economics of Mutuality case study



**Responsible Business Forum: The Economics of Mutuality**

17 May 2019

# LafargeHolcim



**Contributor**  
**Marcel Metzner**



**Contributor**  
**Judith Stroehle**



**Contributor**  
**Alastair Colin-Jones**



**Contributor**  
**Sudhir Rama  
Murthy**



**Contributor**  
**Antonio Carillo**



**Contributor**  
**Maria Eugenia  
Ceballos Hunziker**

## About the Responsible Business Forum Case Studies

This series of case studies explores how mutual approaches to business can help companies and their partners tackle some of the most pressing global challenges. The businesses featured in this series share a commitment to objectives beyond purely financial performance, as well as a serious intent to implement mutual practices through new forms of ownership, governance, leadership, measurement and management.

In particular, these cases address the measurement of multiple forms of capital, ecosystem shaping approaches, leadership development, business education, and policy formulation through laws and regulation that promote mutual conduct. The authors appreciate the collaboration of participating companies in creating these cases.

These cases were first developed for the annual Responsible Business Forum, the convening event of the Mutuality in Business Project, a joint research programme between Saïd Business School, University of Oxford, and the Catalyst think tank at Mars, Incorporated. The Responsible Business Forum brings together global companies, MBA candidates, scholars and activists to share their experience in confronting key challenges in their ecosystems to generate financial, social and environmental value.

## Authors' Note

The conclusions and recommendations of any Saïd Business School, University of Oxford, publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars. These cases are based on information provided to the researchers by participating companies.

## Mutuality in Business

Tel: +44(0)1865 422875

Email: [responsiblebusiness@sbs.ox.ac.uk](mailto:responsiblebusiness@sbs.ox.ac.uk)

Web: [Economics of Mutuality](#)

Web: [Oxford Saïd Mutuality in Business](#)





# LafargeHolcim

## About LafargeHolcim

LafargeHolcim is a multinational provider of building materials. Headquartered in Jona, Switzerland, LafargeHolcim’s portfolio includes concrete, aggregates, ready-mix concrete, and products and solutions that range from asphalt to dry mortar materials (see Table 1). The company is committed to “serving masons, builders, architects and engineers all over the world”<sup>1</sup> by providing “innovative products and building solutions with a clear commitment to social and environmental sustainability.”<sup>2</sup>

The building materials market is worth (CHF) 2.5 trillion per annum and it is expected to grow by 2-3% each year.<sup>3</sup> This projected growth is driven by a number of megatrends:<sup>4</sup>

- Global population growth: the world population is expected to grow 22% by 2015 from 7.6 billion to 9.7 billion.
- Urbanization and megacities: Approximately 2.5 billion more people are expected to live in cities by 2050.
- Increased demand for better living standards and more efficient infrastructure.
- Digitalization opens new avenues for growth and innovation.
- Increased demand for sustainable construction solutions and resource scarcity.

These megatrends offer significant business opportunities, but also pose challenges for balancing societal development and environmental constraints. Buildings and infrastructure are key elements of these opportunities and challenges. On the one hand, the built environment is essential for societal development through the provision of infrastructure, housing, and mobility. The environmental impacts of the built environment, on the other hand, are significant and range from substantial CO<sub>2</sub> emissions to extensive raw materials consumption to large volumes of waste generation. The scale of these impacts is demonstrated by the fact that the built environment accounts for 30 to 40% of global

CO<sub>2</sub> emissions, with cement accounting for between 6 to 8%.

LafargeHolcim was formed in 2015 through a merger of the French company Lafarge and the Swiss group Holcim, creating the world’s largest cement producer. Grappling with a complex post-merger integration process, the company faced a slowdown in some of its key markets and its share price came under pressure in 2016.<sup>5</sup> In 2017, a new CEO was appointed, and the company launched a new business strategy to accelerate profitable growth. The “Strategy 2022 – Building for Growth” rests on four pillars – Growth, Simplification & Performance, Financial Strength, Vision & People – and is underpinned by four 2022 financial targets:<sup>6</sup> 3-5% Net Sales Growth, >5% Recurring EBITDA Growth, >40% Free Cash Flow to Recurring EBITDA, and >8% Return on Invested Capital.

Business Segment	Products
Concrete	Wide range of cements for readymix manufacturers, precasters, road and stabilization, oil and gas wells; low CO <sub>2</sub> cements and speciality cement solutions.
Aggregates	Primary natural aggregates and alternative aggregates <sup>7</sup> for use in construction of roads, rail track beds, the manufacturing of concrete, concrete products, and asphalt.
Ready-Mix-Concrete	Wide range of ready-mix, prefabricated concrete solutions and services for building and infrastructure projects.
Solutions & Products	Portfolio includes asphalt, precast concrete, dry mortar, and other solutions.

Table 1: LafargeHolcim product portfolio.<sup>8</sup>

1 “About Us,” LafargeHolcim, <https://www.lafargeholcim.com/about-us>

2 Ibid.

3 LafargeHolcim (2019a), p. 20

4 Ibid., pp. 20-21

5 Sarah Gordon and Ralph Atkins, “Olsen navigates challenges for LafargeHolcim’s future,” 11 October 2016, <https://www.ft.com/content/6505ca82-8bd9-11e6-8aa5-f79f5696c731>

6 LafargeHolcim (2019a), p. 22

7 See: <https://www.lafargeholcim.com/aggregates-solutions>: “Aggregates are rock fragments extracted from fluvial deposits as in the case of natural sand and gravel or quarried from hard rock formations”

8 “Our Business Segments,” LafargeHolcim, <https://www.lafargeholcim.com/business-segments>

As part of its efforts to achieve these targets, LafargeHolcim implemented several organizational changes, such as the adoption of a leaner corporate structure and the assignment of more profit & loss accountability to the country level. The succession of events that has unfolded since 2015 – the merger between Lafarge and Holcim, the change in leadership, and the launch of the new Strategy 2022 – provides the context for the development of LafargeHolcim’s approach to sustainability.

### Economics of Mutuality Strategy

LafargeHolcim’s identifies its products as essential to human development by providing infrastructure, housing, and mobility to billions of people. To assess the importance of societal and environmental impacts of its business operations, LafargeHolcim has been using a system to track non-financial impacts through financial impact valuation (see section on Integrated Profit & Loss Statement).

LafargeHolcim is committed to contributing towards more sustainable buildings and infrastructure and has therefore articulated a 2050 vision for the built environment: “The built environment of the future will emit zero carbon over its life cycle, will be fully recyclable with maximum recycled content, will have a positive environmental impact and will continue to provide significant value for society.”<sup>9</sup> To enact this vision, four fields of action exist:

Climate	The reduction of carbon emissions is a key priority and LafargeHolcim has reduced its net carbon emissions per tonne of cement by 25 percent since 1990, which is the highest reduction among international cement companies. <sup>10</sup>
Circular Economy	LafargeHolcim uses waste products as substitutes for fossil fuels and other raw materials in its production processes, resulting in a reduced fossil fuel consumption and less waste in landfills. The use of recycled materials account for more than 90% of the materials used at some sites. <sup>11</sup>
Environment	The focus is placed on reducing the water consumption in production processes and minimizing the impacts on water resourced in communities where LafargeHolcim is operating.

Community	LafargeHolcim’s positive impact on communities is twofold: (a) it provides direct employment, tax revenues, and infrastructure development; (b) it runs community programs that provide, for example, vocational training for local residents.
-----------	--

Table 2: LafargeHolcim’s sustainability fields of action.

### Changes to the Sustainability Strategy

Amidst a dynamic and challenging business environment, and a series of organizational transformations, LafargeHolcim’s sustainability strategy has changed significantly in recent years. Following the merger between Lafarge and Holcim in 2015, the newly formed company LafargeHolcim launched a sustainability strategy – “The 2030 Plan” – in 2016. With the overarching objective to generate one third of net sales from more sustainable products and solutions,<sup>12</sup> the strategy incorporated four fields of actions: climate, circular economy, water, and nature. Each of these fields of actions targeted both internal (“in-house”) and external (“beyond our fence”) sustainability impacts. For example, LafargeHolcim committed to reduce its in-house CO<sub>2</sub> emissions by 40% per tonne of cement (vs. 1990) and has pledged to help its customers avoid 10 million tonnes of CO<sub>2</sub> being released from buildings. The dual focus on both internal and external sustainability impacts was the defining mutuality aspect of LafargeHolcim’s sustainability strategy, as stated in the Sustainability Report 2017: “The 2030 Plan goes beyond simply mitigating our impacts – it also addresses the positive impacts our operations can have beyond the boundaries of our plants.”<sup>13</sup>

After a new business strategy – the Strategy 2022 – was launched in 2017, the company adjusted its sustainability approach in 2018 to ensure its alignment with the overall strategic orientation. Maintaining the four fields of action outlined above, LafargeHolcim’s modified its sustainability ambitions by including sustainability targets for 2022 and 2030 and articulated its 2050 vision for the built environment. It is notable, however, that the dual focus on “in-house” and “beyond our fence” sustainability impacts, which was at the heart of the former sustainability strategy, is no longer included in LafargeHolcim’s external communication of its sustainability ambitions. Likewise, the objective to generate one third of net sales from more sustainable products and solutions is no longer externally communicated. These adjustments to LafargeHolcim’s sustainability ambitions have been partly driven by the alignment with the 2022 Strategy, which is geared towards alleviating shareholder concerns over LafargeHolcim’s financial performance. Despite these changes

9 LafargeHolcim (2019b), p. 6  
 10 LafargeHolcim (2019a), p. 46  
 11 Ibid., p. 49  
 12 LafargeHolcim (2018b), p. 4  
 13 LafargeHolcim (2018b), p. 4

in the external communication of its sustainability ambitions, LafargeHolcim has maintained its commitment to creating value for society:

**“While our financial results attest to a successful strategy, this only tells part of the story. Your company aims to create value not only for its shareholders but also for society as a whole, as we have been doing for more than one-hundred years. From the Grand Paris Express in France, currently the largest infrastructure project in Europe, to transformative projects in Ecuador and India, our products and services help to improve people’s lives and spur economic growth.”<sup>14</sup>**  
*Beat Hess, Chairman of LafargeHolcim*

Furthermore, the alignment of LafargeHolcim’s sustainability ambitions and its Strategy 2022 has been underpinned by a number of organizational changes that have strengthened the status of sustainability issues within the company. Firstly, an Ethics, Integrity & Risk Committee was created. Chaired by the Group Chief Financial Officer and the Group General Counsel, this committee works closely with the sustainability team to further strengthen the corporate sustainability performance. Secondly, the Head of Sustainability now reports directly to the Chief Executive Officer and sustainability topics are regularly discussed at Executive Committee level. Thirdly, some of the elements of LafargeHolcim’s former sustainability strategy “The 2030 Plan” have been translated into operating principles that govern everyday operations. For example, every production facility needs to be certified to ISO 14001, the world’s leading environmental management standard.

## Integration of Non-financial Measurement

LafargeHolcim has defined a number of non-financial key performance indicators that measure the company’s progress against its 2050 vision for a sustainable built environment. The company monitors its sustainability performance by using one lead metric for each of its four sustainability-related fields of action (see Figure 1 below). As part of the adjustments of its sustainability approach in 2018, LafargeHolcim restated its percentage-based targets as numerical targets that reflect the performance level that is expected, rather than a percentage reduction. For example, the Climate & Energy target indicates that the company aims to reduce its net CO<sub>2</sub> emissions from 576 kilograms of CO<sub>2</sub> per tonne of cementitious material (kg CO<sub>2</sub>/tcme) in 2018 to 560 and 520 kg CO<sub>2</sub>/tcme in 2022 and 2030, respectively. Consistent with LafargeHolcim’s climate leadership role in the cement industry, this CO<sub>2</sub> reduction target is aligned with the low-carbon technology roadmap defined for the cement sector by the International Energy Agency (IEA) for a two degree scenario.<sup>15</sup>

Sustainability pillars	CLIMATE AND ENERGY 	CIRCULAR ECONOMY 	ENVIRONMENT 	COMMUNITY 
Objective	Reduction of CO <sub>2</sub> emissions	Increased reuse of waste-derived resources	Reduction of freshwater withdrawal	Creation of shared value
Lead metric	CO <sub>2</sub> emitted (kg CO <sub>2</sub> /t cementitious)	Quantity of waste reused (M tonnes)	Freshwater withdrawn (liters freshwater/tonne cementitious)	Number of new beneficiaries per year (M new beneficiaries)
Performance 2018 2017 restated with 2018 scope	576 582	52 49	305 330	2.9 2.8
Target 2022 restated with 2018 scope	560	60	291	5.0
Target 2030 restated with 2018 scope	520	80	262	5.0

Figure 1: LafargeHolcim Sustainability Pillars.<sup>16</sup>

15 International Energy Agency and World Business Council for Sustainable Development (2018)

16 LafargeHolcim (2019b), p. 7

In addition to its non-financial targets, LafargeHolcim has developed an innovative non-financial measurement tool for assessing its sustainable value creation for shareholders, society, and the environment. As one of the first companies<sup>17</sup> to publish financial adjustments through non-financial impact assessments, and in collaboration with KPMG, LafargeHolcim pioneered the development of an Integrated Profit & Loss (IP&L) statement in the Construction Materials sector. The IP&L statement complements conventional financial performance measures by raising awareness of the extended impacts of LafargeHolcim's business activities on society and the environment. The IP&L method draws on the discipline of impact valuation and utilizes "applications of welfare economics to determine the positive and negative value contribution of business activities to society in monetary terms."<sup>18</sup>

During the development phase in 2013 and 2014 at the Holcim group, one of LafargeHolcim's predecessors, a comprehensive stakeholder consultation was conducted to identify the most material socio-economic and environmental

impacts of Holcim's business activities. The measurement and monetary valuation of these impacts forms the backbone of LafargeHolcim's IP&L approach.<sup>19</sup>

In 2018, LafargeHolcim assessed its financial, socio-economic, and environmental impacts with the IP&L method in the fourth consecutive year. The latest IP&L statement (see Figure 2 below) indicates that LafargeHolcim's total monetized impacts were 1.8 times higher than its retained financial earnings.<sup>20</sup> Breaking LafargeHolcim's impacts further down into its constitutive elements reveals that its positive value contributions in the socio-economic dimension were largely driven by the multiplied effect of salaries, taxes, and social investments. In contrast, the most significant negative impacts were the company's CO<sub>2</sub> emissions in the environmental dimension, which accounted for 75% of the total cost to society in 2018.<sup>21</sup> Through this IP&L, LafargeHolcim argues that its contribution to society and the environment were net positive.

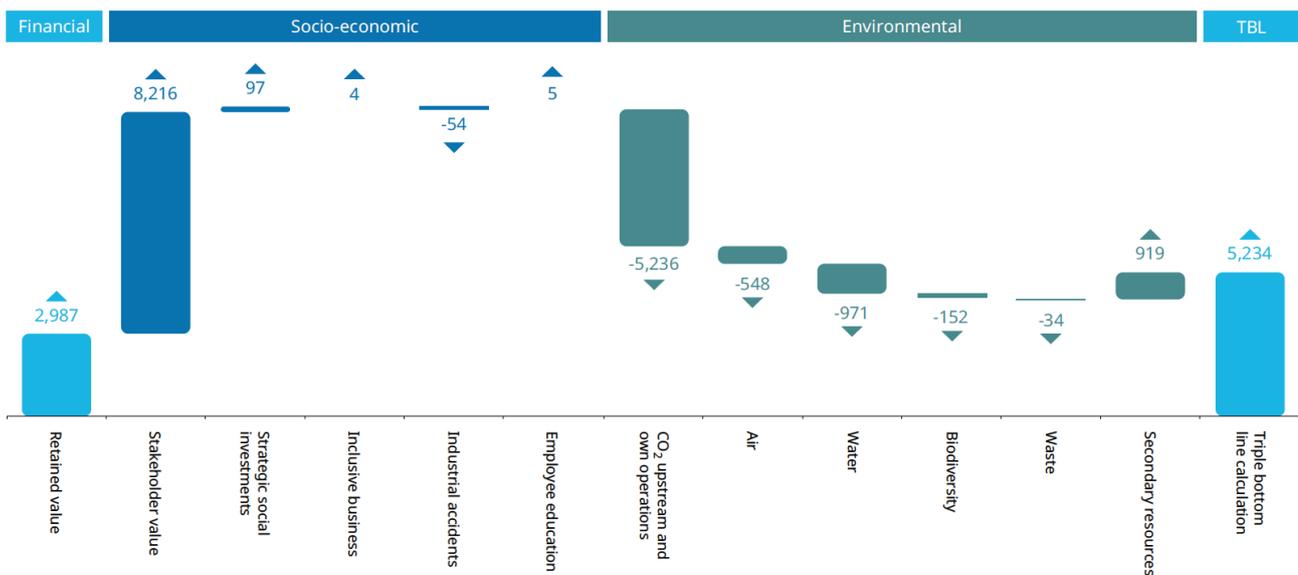


Figure 2: LafargeHolcim Integrated Profit & Loss Results 2018.<sup>22</sup>

17 Kering's environmental P&L is another example of early efforts in this field.

18 LafargeHolcim (2018a), p. 2

19 For a detailed explanation of the assumptions used in the IP&L calculation, see: <https://www.lafargeholcim.com/Sustainability-reports>

20 LafargeHolcim (2018a), p. 3

21 LafargeHolcim (2019b), p. 17

22 LafargeHolcim (2019b), p. 17

According to LafargeHolcim, the application of the IP&L method for calculating the financial, environmental, and social impacts of its business activities methods in monetary terms offers three key benefits:

- *Understand the extent of impacts:* Assess and quantify the risks of externalities on the LafargeHolcim bottom line and translate environmental and social KPIs into a common language, understandable throughout the organization.
- *Shape the mindset:* Have a comprehensive view of company performance/impact, track progress over time and engage, mobilize, and inform beyond sustainable development experts.
- *Enhance decision-making process:* Investments lock LafargeHolcim into assets for a long period of time. The IP&L enables us to start assessing decisions from the bottom up, working with interested companies.”<sup>23</sup>

## Decision Making and Integrated P&L

LafargeHolcim’s IP&L approach enables a holistic analysis of the risks and opportunities associated with its societal and environmental impacts and quantifies the implications of these impacts for the company’s bottom line. However, it is important to keep in mind that the primary purpose of the IP&L tool is not to provide a definitive statement of LafargeHolcim’s financial accounts. Instead, the tool is designed to facilitate a better understanding of the company’s societal and environmental impacts, which improves communication with stakeholders and, ultimately, enhances organizational decision-making processes.

As such, the IP&L represents a superior version of a management accounting system, which enables better decision making based on a more complete set of information than merely that which is financial. LafargeHolcim pioneered the internal application of the IP&L approach in India, where it was used to evaluate and demonstrate the effectiveness of corporate social responsibility projects. The integration of the IP&L method into internal business processes was further tested in a pilot in Indonesia, where it was applied to prioritize projects and incentivize management by including the IP&L approach into remuneration objectives.

## Prognosis

LafargeHolcim is committed to advancing the operationalization of impact valuation methods such as the IP&L for its key business processes. To this end, the company will expand its collaborations with other companies in cross-sectoral initiatives such as the Impact Valuation

Roundtable<sup>24</sup> to share best practices and advance knowledge on measuring impacts of companies on the economy, society, and environment. Going forward, LafargeHolcim will engage with a new OECD-sponsored<sup>25</sup> IP&L initiative that aims to (1) standardize a model and calculation tool, (2) align external disclosures, (3) pilot decision making and steering applications, (4) make the outcome available via the OECD. These initiatives form part of a larger trend in the corporate sustainability field, which shifts focus from evaluating organizational measures to assessing the impacts of these measures on society and environment at large. This is exemplified in the growing efforts of (institutional) investors to assess the contributions of business activities to the UN Sustainable Development Goals.

Although such impact-focused approaches are at an early stage, recent institutional developments seek to consolidate the emerging field by providing a coherent set of definitions and standards for impact management. LafargeHolcim’s IP&L is one such impact valuation approach primarily concerned with performance measurement and benchmarking.

However, a number of open questions and challenges remain. Firstly, IP&L and other impact valuation approaches are designed to reduce the complexity of organizational impacts on society and the environment by enabling the systematic measurement and comparison of impacts. In the case of globally operating companies with geographically distributed supply chains, the impacts of any single organization are extraordinarily complex. Reducing this complexity promises to be one of the key benefits of IV but it also poses the risk of undue oversimplification, resulting in a distortive, and ultimately unhelpful, analytical tool. Striking the balance between pragmatic complexity reduction and inadequate simplifications requires the careful calibration of the assumptions that underpin IV analyses.

Secondly, the application of IP&L is challenging due to the lack of measurement and valuation standards. This is partly a result of the inherent complexity of the social and environmental processes that are impacted by business activities. Measuring impacts, in particular those occurring outside the immediate organizational boundaries (e.g., in the supply chain or in the use phase of products), can be challenging due to limited data availability and the subsequent step of valuing impacts can be equally, if not more, difficult. For example, how do you establish the impacts of business activities on biodiversity? And, if you are able to measure these impacts, what is the monetary value of positive or negative changes in biodiversity?

Thirdly, the technical challenges discussed above are enmeshed with conceptual, and ultimately ethical, considerations. Although the monetary valuation of impacts

<sup>23</sup> LafargeHolcim (2018a), p. 2

<sup>24</sup> Operationalizing Impact Valuation: Experiences and Recommendations by Participants of the Impact Valuation Roundtable,” March 2017, [https://docs.wbcsd.org/2017/05/IVR\\_Impact\\_Valuation\\_White\\_Paper.pdf](https://docs.wbcsd.org/2017/05/IVR_Impact_Valuation_White_Paper.pdf)

<sup>25</sup> Organisation for Economic Co-operation and Development

has clear advantages in terms of complexity reduction, i.e., it translates different impacts into a common language, it also poses serious ethical questions. For instance, what is the appropriate monetary valuation of workplace fatalities? And can negative impacts such as workplace fatalities be compensated by positive impacts in other areas? The latter question goes to the core of IP&L, and of other impact valuation approaches, raising the fundamental issue of the commensurability of impacts. Is it possible, or desirable, to offset negative environmental impacts with positive social impacts or vice versa? Can, or should, a stable climate be traded-off against positive corporate tax contributions?

The challenges outlined above go beyond the immediate application of IP&L and point towards some of the fundamental and difficult issues of sustainable development. This, however, neither suggests that these issues are beyond the realm of IV and Impact Management, nor does it imply that IV approaches are inherently flawed. Instead, IV approaches such as LafargeHolcim's IP&L might be useful tools precisely because they enable a structured engagement with the intricacies of companies' external impacts on the society and environment. In this sense, IV methodologies can equip organizations with a powerful process to systematically work through the complex interactions between their activities and the wider business environment. This might be the key for unlocking a better understanding of how companies can successfully create value for themselves and society at large.

## References

International Energy Agency, & World Business Council for Sustainable Development. (2018). Technology Roadmap: Low Carbon Transition in the Cement Industry. Retrieved from <https://webstore.iea.org/technology-roadmap-low-carbon-transition-in-the-cement-industry>

LafargeHolcim. (2018a). LafargeHolcim Integrated Profit & Loss Statement 2017: Assumptions Used in the IP&L Calculations. Retrieved from <https://www.lafargeholcim.com/Sustainability-reports>

LafargeHolcim. (2018b). Sustainability Report 2017. Retrieved from <https://www.lafargeholcim.com/sustainable-development>

LafargeHolcim. (2019a). Annual Report 2018. Retrieved from <https://www.lafargeholcim.com/investor-relations>

LafargeHolcim. (2019b). Sustainability Report 2018.



Saïd Business School at the University of Oxford blends the best of new and old. We are a vibrant and innovative business school, but yet deeply embedded in an 800-year-old world-class university. We create programmes and ideas that have global impact. We educate people for successful business careers, and as a community seek to tackle world-scale problems. We deliver cutting-edge programmes and ground-breaking research that transform individuals, organisations, business practice, and society. We seek to be a world-class business school community, embedded in a world-class university, tackling world-scale problems.

### **Mars Catalyst and the Economics of Mutuality programme**

Mars' approach to business has long since been guided by five principles – quality, responsibility, efficiency, freedom and mutuality. Together they inform and guide the actions of all Mars associates every day as they do their jobs and interface with the outside world.

The origins of the Mutuality principle go back to 1947 when Forest Mars Snr, who led and grew the business through the 1920's to the 1960's, wrote a letter to all 500 associates of the company that said "the sole purpose of the company is to create a mutuality of benefits with all stakeholders that the company touches; from suppliers to customers as well as governments and competitors and naturally associates and shareholders". This far-sighted thinking, that the company could only be successful if everyone around the company was being successful, has been a cornerstone of Mars' business philosophy ever since.

Mars has therefore always been interested in how it can best live up to this principle; and to find new ways of driving mutuality with all stakeholders it touches. This led to Mars' leadership tasking its economic research unit, Catalyst, to start new work into unexplored territory for business; to identify critical drivers of mutuality and, using business pilots, to develop and test new metrics and management practices that can help boost mutuality in business situations. This work has been called the Economics of Mutuality.

This work has established promising links between increasing social, human and natural capital (that can be measured with simple & stable metrics) and a corresponding increase in financial capital – demonstrating how a company can do both good and well at scale. A number of pilots have now been completed in the areas of micro-distribution, the employees of Mars and in agricultural development that suggest that these relationships are true in different places and situations.

### **The Oxford Mars partnership**

On the back of these promising findings, a multiyear partnership with Oxford University's Saïd Business School was established in 2014 to focus on the development of a business management theory for the Economics of Mutuality with corresponding teaching curriculum, new management practices, and case study research. The research programme has combined the pursuit of normative questions – what is

mutuality and how should it be enacted? – with grounded, ethnographic research on current thinking and practices. This has led to the development of field experiments and case studies examining how large corporate actors conceive of and pursue responsible business practices, and how these relate to their financial and social performance.

### **Mutuality in Business**

Tel: +44(0)1865 422875

Email: [responsiblebusiness@sbs.ox.ac.uk](mailto:responsiblebusiness@sbs.ox.ac.uk)

Web: [Economics of Mutuality](#)

Web: [Oxford Saïd Mutuality in Business](#)