

ESG Casebook

Singapore Venture & Private Capital Association

MESSAGE BY CHAIRMAN

As I pen this note, we are witnessing a continual battle between humans and nature with the virtually simultaneous record heat waves in China and floods in Pakistan. These reinforce Minister Grace Fu's message at our recent annual conference: Humanity is at an inflexion point re: climate action; unless we 'awaken' and act decisively, we will bear the consequences of 'humanity's folly' with accelerated global warming having devastating impacts on large segments of the world's population.

Beyond the climate imperative, we are in an environment of enhanced geo-political tensions, high inflation and low global economic growth, which will hit the most vulnerable sections of society hardest, and could exacerbate poverty, inequalities and potentially, fuel social unrest.



Sanjay Guraj Chairman of SVCA

Private capital can play a meaningful role in alleviating these environmental and social issues, while exploiting growth opportunities in a manner that benefits all stakeholders. Despite criticism from some quarters or studies correlating underperformance with ESG portfolios, the vast majority of the investment fraternity is rightfully aligned behind the importance of ESG. We at the SVCA too have restated our vision to bring focus on harnessing the power of private capital towards the achievement of the sustainable development goals (SDGs).

Individual firms within our diverse member base are at different points in their ESG and Impact journeys. For instance, at my own firm, the Everstone Group, we've progressed from the adoption of best-in-class ESG standards towards an impact management framework that brings focus within each of our businesses to the creation of measurable impacts. To elaborate as an example, our operations across Private Equity, Climate Impact, Logistics, Digital and Venture collectively lend themselves to calibrated action on five principal SDGs: Decent Work & Economic Growth; Gender Equality; Climate Action; Industry, Innovation & Infrastructure and Good Health & Well Being.

Other firms will have different strategies, capabilities and focus. What is important is the integration of ESG and Sustainability factors in how each of us conduct our businesses.

The purpose of this Case Book is to showcase examples of work being done by firms in our ecosystem and inspire others to build on that knowledge. This collective effort connects with SVCA's core purpose of acting as the common voice of the private capital ecosystem, promoting the collective interests of our members and facilitating the exchange of best practices.

We will continue to expand on these efforts by developing resources and capabilities and provide platforms for sharing best practices.

We'd like to thank all firms that have contributed, and look forward to hearing about and featuring many more ESG and Impact success stories from our community in the future.

NOTE FROM EDITOR



Vesi Kertikova, Co-Chair of SVCA's ESG Committee

It is with great pleasure that we would like to share with you the inaugural case study book by SVCA on best practices in ESG, Sustainability and Impact Investing. The book aggregates a diverse set of approaches and strategies of how investment firms are evolving and advancing their practices on this increasingly important topic. We hope that the real-life examples from our ecosystem will serve as a source of inspiration for your own investment philosophy and mandate. We are looking to make this publication a tradition and launch it on a periodic basis. Please do reach out to the SVCA Secretariat if you would like to submit a case for the next edition.



CONTRIBUTORS

ABC Impact	5
v2food - Accelerating consumers' transition to a more plant-rich diet & reducing emissions, water & land use	
Affinity Equity Partners Sido Muncul - Delivering wholesome and resilient stakeholder value	9
ERM The benefits of ESG Due Diligence for new investments	13
Heritas Capital Cakap - Leveraging technology and innovation to increase access to education	18
LeapFrog Ascent Meditech - ESG's essential role in scaling a medical device manufacturer in India	23
Openspace Ventures Jiwa Group - ESG in a leading tech- enabled F&B chain in Indonesia	27
Quadria AIG - Delivering affordable high quality healthcare in India	31
Temasek Integrating climate change considerations in the investment process	35



Accelerating consumers' transition to a more plant-rich diet & reducing emissions, water & land use

A case study on the environmental benefits of plant-based meat products

v2food -AUSTRALIA

Industry vertical: Packaged Foods &

Meats

Location: Sydney, Australia

Investment year: 2020

For more information on the company

visit: https://www.v2food.com/

Founded in partnership with Australia's national science agency CSIRO [1] in 2019, v2food uses protein extracted from legumes to create plant-based meat. v2food is led by the vision to change consumer attitudes towards plant-based meat. The company has been continuously working towards producing plant-based meat products that mimic the taste and texture of animal-based meat and provide a sensory experience akin to animal-based meat for its consumers at a price equivalent or lower than animal-based meat.

[1] Commonwealth Scientific and Industrial Research Organisation

The Challenge: An inefficient food system and rising demand for animal-based meat

As the world's population moves toward 10 billion and an emerging middle class continues to grow and urbanize, meat consumption is projected to increase by 70% globally by 2050 [2]. At the same time, the agrifood industry is struggling to keep up. Multiple issues simultaneous attention: productivity, improving resource efficiency and reducing waste along the supply chain. One important form of inefficiency that needs to be addressed upstream is the low feed conversion ratios in livestock production. Farmed animals typically consume significantly more protein than they produce. Animal agriculture is also a leading cause of greenhouse gas emissions, land degradation, water scarcity and biodiversity loss.

- 14.5% of global carbon emissions come from livestock farming [3]
- Animal agriculture consumes almost a third of the water used in global agriculture [4]



Figure 1: v2food's Plant-based Meat Products in the Store

The Solution: Accelerating the transition to plantrich diets

Between its resource efficiency and its appeal to consumers, plant-based meat has tremendous potential to help build a sustainable food supply. v2food produces soy-based meat products that are intended to appeal to meat eaters.

- [2] Executive Summary (Synthesis) | Creating a Sustainable Food Future (wri.org)
- [3] FAO (food and Agriculture organisation of the UN
- [4] Good Food Institute
- [5] A <u>Survey</u> of Consumer Perceptions of Plant-Based Meat
- [6] Impact Management Norms, Impact Management Project

Based on consumer insights from the United States, plant-based meat that look and taste like animal-based meat are mainly consumed by animal-based meat eaters, contributing to the growing flexitarian trend [5].



Figure 2: v2food's Products

We invested in v2food for its ability to produce plantbased meat at a lower environmental footprint vs. the animal-based meat and at a price that is accessible to the mass consumer market. The investment has enabled v2food to expand in high impact geographic markets in Asia Pacific where meat consumption is expected to rise significantly.

Our investment in v2food is in line with United Nations Sustainable Development Goal SDG 2, "Zero Hunger" and SDG 12. The SDG target 2.4 focusses on developing sustainable food production systems and implementing resilient agricultural practices that productivity and production while increase maintaining the ecosystem and SDG target 12.2 aims to achieve the sustainable management and efficient use of natural resources.

Assessing the environmental impact of plant-based meat

During the impact due diligence process we assessed the company according to Impact Management Project's (IMP) [6] five dimensions framework.

ABC has developed structured and standardised impact assessment processes to assess and quantify the expected impact of investments, incorporating the IMP's five dimensions of impact, standardised metrics (e.g., IRIS+), and contribution to SDG target(s). The framework informs our investment decision-making and provides a robust system for aggregating, comparing, and managing impact performance which incorporates:

- An initial screen to determine alignment with the SDGs, materiality, intentionality and risks
- A deal-level logic model that ties to specific SDG targets and
- An impact scoring tool aligned with the IMP framework.

Our impact assessment for v2food relies on the assumption that a significant percentage of v2food products will be purchased and consumed by consumers of animal-based meat and will therefore substitute an animal-based meat product.

To quantify the environmental benefits, we relied on publicly available lifecycle assessment of the animal-based beef value chain during our diligence phase. We developed baseline calculations for the environmental impact of the animal-based beef industry across several factors: carbon gas emissions, water use and land use. The results were then compared with similar data for v2food products.

Post our investment, v2food conducted a lifecycle assessment (LCA) [7] to identify the environmental footprint of its products in association with Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency. The LCA revealed that in manufacturing one kilogram (kg) of its plant-based mince product, v2food produces only 2.2 CO2 kg of carbon emissions and consumes 13 litres of water, significantly lower than the footprint of animal-based meat.

[7] CSIRO Research Publications Repository - Publication. The LCA compares the footprint of only plant -based beef mince product of v2food with actual footprint of animal-based beef product. The LCA studies the cradle to grave impact of v2food products and includes impact of all ingredients (protein, fat, oil, TVP, etc.) and all processes (pre manufacture, manufacture, packaging, distribution, retail, and consumer).

"Helping preserve our planet doesn't need to be hard work. By swapping out one beef meal for v2 per week, families can save the same amount of carbon emissions as swapping to an electric car. That small dietary change is an easy way to reduce your impact on the environment"

Nick Hazell · Founder and CEO at v2food



Figure 3: A v2food Marketing Poster

Active ownership & post-investment engagement

We engage closely with portfolio companies and management teams throughout the life of the investments to support their achievement of the growth, value and impact targets that were envisioned at the point of investment. We have worked with v2food to identify impact metrics tied to the initial impact thesis to track performance and validate our thesis.

While we assess companies based on their ability to drive positive outcomes for society, we also ensure that companies are aware of possible environmental and social issues that may arise in their own organisation, their operations and their supply-chains. We supported v2food to complete the B Impact Assessment (BIA), a tool developed by B Lab to understand their key ESG risks and identify opportunities to improve sustainability of their operations. The company is currently undergoing verification in order to be B Corp Certified.



About ABC Impact

ABC Impact ("ABC") is a Singaporeheadquartered and Asia-focused private equity (PE) fund dedicated to impact investing. 100% of our investment activities are focused on positive impact creation. All our portfolio companies are committed to addressing the world's most pressing challenges, such as climate change, resource scarcity, and deepening social and economic inequality. We invest in high growth businesses where impact outcomes are collinear with the commercial success of the companies. We raised an inaugural fund of S\$405M (US\$298M) in 2019, and since inception in 2019, have invested over US\$175M [10]. In 2021, the impact across its portfolio amounted to 1.65 million metric tons of emissions avoided and 10.08 million people and microenterprises supplied with essential services

[10] As of August 2022

Read our Impact Report here:

https://www.abcworld.com.sg/impactreport
2021/









Delivering wholesome and resilient stakeholder value

A case study of holistic sustainability integration at Sido Muncul

SIDO MUNCUL - INDONESIA

Industry vertical: Healthcare and

Consumer Goods

Investment year: 2018

For more information on the company

visit:

https://www.sidomuncul.co.id/en/home.

html

Read our corporate sustainability

report here:

https://investor.sidomuncul.co.id/misc/sr/

SR-2021.pdf

Company Snapshot

- 70 years of heritage
- 4,000 employees
- ~2 million points of distribution throughout Indonesia

Sido Muncul is the largest, most established, integrated herbal products and medicines brand owner and manufacturer in Indonesia listed on the IDX since 2013. With over 70 years of heritage, Sido Muncul specialises in creating modernised "Jamu" or herbal products and medicines based on a wide range of natural Indonesian herbs and medicinal plants. Sido Muncul has a leading market share of 84% in the Indonesia's herbal products market with clinically proven herbal medicines. The Company has over 4,000 employees and distributes its products through ~140K wholesalers and over ~2 million points of sales throughout Indonesia. Affinity Equity ("Affinity") invested in Sido Muncul in 2018.

Holistic ESG Integration which leads to environmental and community benefits

Sido Muncul's vision is to be a pharmaceutical, traditional medicine, health food and beverage and herbal ingredients company which benefits the community and environment.

Since our investment in 2018, and through our representation on Sido Muncul's board, we partnered with the Company to help formalise its ESG approach into a holistic strategy. The strategy was developed having identified key areas to fortify post our pre-investment ESG due diligence.

Each of the five key pillars of Sido Muncul's sustainability strategy addresses ESG issues material to the business and focuses on (i) Environmental preservation, (ii) Inclusive business, (iii) Employee welfare, (iv) Product integrity and (v) Sustainable sourcing.

Sido Muncul's sustainability report, published since 2018, supports transparency and accountability and reports on progress on the identified areas.

(i) Environmental Preservation

In recognition of the importance of climate change, Sido Muncul identified energy consumption at its production facilities as a key area to address. In 2021, Sido Muncul used the herbal dregs biomass, a byproduct of its manufacturing process, as a renewable energy source for ~50% of its energy needs, and installed solar panels on its production facilities with a capacity of 2000 kWp.

Further, Sido Muncul invested in production equipment upgrades for improved energy efficiency. As a result, carbon emissions intensity was reduced by 22% in 2021, as compared with its emissions in 2020.

Deforestation is a significant contributor to climate change. In 2021, Sido Muncul partnered with the Katingan Mentaya Project (KMP) to prevent deforestation in Central Kalimantan. Instead of traditional slash and burn cultivation methods, local tribal communities are mentored in agroforestry to grow raw ingredients for Sido Muncul's herbal medicines. This project also has the potential to generate carbon credits and additional income for the local tribes.

(ii) Inclusive Business

Sido Muncul supports inclusion of local farmers through farming community partnerships, partnering with more than 1,700 farmers in Indonesia. It provides farming advice and higher quality seeds for better crop yields and income stability through offtake schemes.



Figure 1: Farming Partnerships with Local Community

One example of this partnership is Sido Muncul's support of cardomom farmers in the Sambirata Village through its Fostered Farmers Programme. Farmers received training on proper cultivation methods and learned to make biopesticides and compost. Sido Muncul supported the development of a Cardamom Drying Facility, where energy is generated by micro hydro power plants. Through Sido Muncul's offtake scheme, farmers received ~6x more income because of the proper processing of cardamom. In 2021, the collective income of the village was IDR 2.7billion. Young people are also returning to the villages to farm cardamom as jobs become available.

"After two years of learning to farm and process cardamom as raw material for Sido Muncul, I really feel the results and benefits. We, young people, have just realized that our village has extraordinary natural potential. Thanks to Sido Muncul, more and more young people are interested in joining us. Together we get the blessings of cardamom while caring for and protecting nature."

Sapto, a young spice farmer

(iii) Employee Welfare

Sido Muncul cares for its employees through providing equal opportunities and training. Female employees make up 50% of its total workforce with 37% female employees in managerial positions. The Sido Muncul Academy, its in-house learning center, is responsible for designing and implementing employee training. In 2021, the number of training hours increased by 51%. In terms of employee health and safety, Sido Muncul is ISO 45001 (Health and Safety Management System) certified for its two main manufacturing facilities and there have been zero fatalities caused by work accidents.



Figure 2: Employee Training on Spice Quality

(iv) Product Integrity

Safety and quality management is part of Sido Muncul's process for providing high quality and safe and healthy products. Sido Muncul has received ISO certifications for quality management, food safety and Good Manufacturing Processes ("GMP") and HACCP certifications for manufacturing of herbal medicines. Sido Muncul's in-house R&D facility constantly innovates to develop better quality products. In 2021, a dedicated research center was set up to breed better seeds and grow plants that are more adaptable to climate change.



Figure 3: Main Product: Tolak Angin

(v) Sustainable Sourcing

Sido Muncul continually improves the sustainability of its supply chain through engagement with its suppliers and Fostered Farmers. 100% of its raw ingredients such as ginger, turmeric, cardomom, pachouli and anise are locally sourced. Clear requirements for quality, food safety and sustainability are provided to suppliers with regular supplier audits and feedback is given to improve raw ingredient quality.



Figure 4: Sustainably Sourced Spices

Recognition as an ESG leader in the industry and among the investor community

Sido Muncul's focus on material ESG factors is reflected in the growth and resiliency of its business performance. Over the last 3 years, revenues and profits have increased, which is also reflected in its share price growth of 258.3%. The company's market value has also showed remarkable resiliency through the 2022 market turbulence marked by the Russia-Ukraine crisis. Its market performance has reaffirmed the conclusions from the 2015 Harvard Business School academic study on ESG which showed that markets do reward companies which focus on material ESG factors.

Sido Muncul is a constituent of all 4 IDX ESG indices, including being 1 of 30 firms selected on the IDX ESG Leaders index.

In 2021, Sido Muncul was awarded a Gold PROPER Award by the Indonesian Ministry of Environment and Forestry and the Green Industry Award by Ministry of Industry in recognition of its excellence in ESG.



Delivering financial and sustainable value to all stakeholders

Through its holistic ESG strategy, Sido Muncul has shown how ESG can be a clear driver for business success by delivering value to the spice farmers in its supply chain, employees, shareholders, customers and the broader community.

With its ESG strategy firmly in place, Sido Muncul has a strong foundation to innovate further, developing new natural health products, growing responsibly and establishing itself as a truly sustainable, better business.

About Affinity Partners

Affinity is one of the largest and longest established, independent private equity firms in Asia, with founding partners that have worked together since 1998. Led by 9 partners with an average tenure of 17 years, Affinity has a large and local investment team and a total staff strength consisting of 80 professionals in 5 offices across Asia Pacific.

With our combined experiences, insights and professional expertise, Affinity has more than two decades of track record in delivering consistent performance across multiple funds for our investors – some of the largest pension funds, sovereign wealth funds, and financial institutions globally. As of 31 December 2021, Affinity has invested US\$ 9 billion in capital, executing 58 transactions with a total transaction value of US\$ 22 billion.









The benefits of ESG Due Diligence for new investments

A Case Study ESG DD for an E-commerce cosmetics company in Greater China

E-COMMERCE COSMETICS COMPANY

Industry vertical: Consumer Discretionary

Location: Greater China

Over the recent years, investment firms have turned their attention towards how climate change and environmental, social and governance (ESG) issues impact their investment decisions. Investors are getting serious about ESG – recognising the importance of taking a more holistic approach to managing their investment which includes the assessment of material ESG considerations.

In-depth analysis of ESG issues can help investors make informed decisions and create stronger and better business outcomes. The insights and recommendations provided help mitigate risks, effect positive impact and long-term performance of the companies in which they invested and bring about value-creation opportunities.

Early identification of material and relevant issues such as climate change, human rights, natural capital and corruption can avoid impending complex and costly risks. A thorough ESG assessment can help appropriately price risks and assess the value impact potential for PE and VC investors. Recommended actions can be deployed to rectify material ESG risks or seize untapped opportunities as part of the post investment value-creation plan.

ESG DD for Investment in an e-Commerce Cosmetics Company

The consumer industry has always been an attractive investment for many private equity firms. With the increasing buying power of the growing populations across the Asia Pacific region, combined with rapid technology growth, the industry has enjoyed robust growth in the recent years.

A leading Private Equity firm had identified an opportunity to invest in an e-commerce cosmetics company headquartered in China (the "Company") to potentially IPO the firm in US stock markets.

The Company is set up to reach out to digitally native consumers. It builds its core capabilities with multiple brands, offering a wide range of products catered to the needs of their customers with expansive ecommerce presence and active social media engagement. The Company has no production facilities and engages Original Equipment Manufacturers (OEM) for its production. Its distribution footprint is established across Asia and expanding into US and Europe.

Based on initial observations, the Company is asset light and ESG risks inherent with the investment appear low. But the perception may be wrong.

Limited Access to Information Against a Tight Timeline

The PE firm participated in a bidding process and was granted limited access to facilitate the due diligence. In efforts to obtain a better understanding of the related ESG risks, the investor's in-house ESG team approached ERM to conduct an ESG Due Diligence.

Apart from the internal requirement of an ESG DD prior to Investment Committee (IC) approval, this assessment would also facilitate their negotiation with the Company and provide a post deal ESG value-creation plan. ERM team had a window of only 3 weeks to complete the ESG DD with limited access to the Company.

Identifying the Key ESG Risks

In recent years, customers have increasingly demanded more transparency in the labelling of cosmetics products. As a response, many companies are increasing the use of more natural ingredients in their formulations. The ingredients increasingly contain natural commodities, such as fruits, nuts, grains and minerals. Some of these commodities are considered high risk in sourcing practices, such as cocoa, palm oil and mica.



Figure 1: Potential ESG Risks from Cosmetic Ingredients

Potential ESG Risks from Cosmetic Ingredients

In an e-commerce business where the manufacturing of products is highly dependent on supply chain partners, potential material ESG risks are often concentrated in a wide network of suppliers involved in the OEM. The ability of the Company in managing supply chain considerations will have indirect implication on the investor's reputation. The depth and breadth of the commodities used in the supply chain, and tracing and monitoring the multiple tiers of production make the evaluation a challenging one.

Additionally, the cosmetics industry and e-commerce companies have a few other high ESG risks, which include but are not limited to:

Cosmetic industry	e-Commerce business
 The usage of large amount of plastic in its packaging Potential animal testing for product developments Potential controversial advertisement practices (e.g. whitening products) 	Long working hours High staff turnover rate Data privacy Product recalls DE&I

Conducting due diligence using a digitally-enabled approach

Given that the Company does not have its own production facilities, ERM proposed a two-fold approach for the ESG DD:

- 1. Assess the Company's internal operations and manage ESC risks as an e-commerce business
- 2. Evaluate ESG risks in the Company's key supply chain related to the manufacturing of cosmetic products

The ESG DD covered the Company's corporate level and five selected Tier 1 suppliers using a digital-enabled approach including management interview, external factor reviews and peers benchmarking. ERM created the scope by mapping out relevant material ESG factors based on the Company's industrial sector and operating geography, referencing standards such as Sustainability Accounting Standards Board (SASB) and applicable ESG regulations.

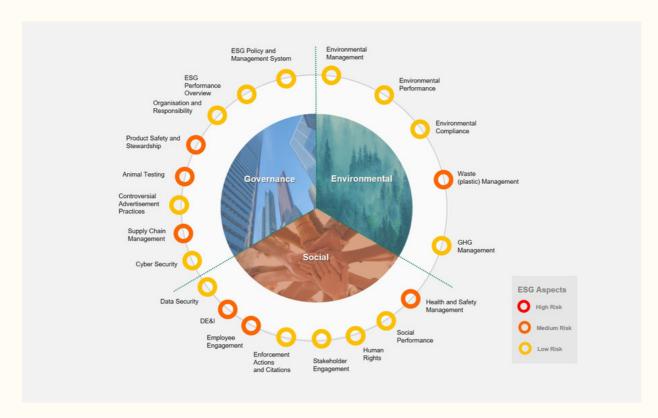


Figure 2: A Representation of a ESG Due Diligence Considerations

Empowering with Actionable Intelligence

ERM uses the Boots-to-Boardroom approach, taking and interpreting the technical ESG findings into strategic business insights and implications. Those insights were delivered in an in-depth report highlighting the sectoral ESG risks alongside a detailed analysis of the potential risk and opportunity for the Company. The report also contains recommendations on how to operationalise those insights with the objective to protect value in mitigating ESG risks, and creating value.

The overall project was conducted in an efficient manner, by mobilising a local team, embedding the culture, languages and its value chain and operations into the considerations. With ERM's global sector expertise, the firm harnesses the collective knowledge and experiences to provide robust yet pragmatic insights and recommendations.

The due diligence work provided detailed information and applied a sectoral lens, with the conclusion that even an asset light operation can have potentially high ESG risks. These issues are concentrated in the supply chain, and thus can be a potential blind spot and challenging for PE investors to manage. Some of the key highlights include:

- Supply chain management: the company had mechanisms in place to govern the supply chain in areas such as product development, risk management framework, restricted substance watch list and certification audits for its OEM partners. Despite all these measures, a number of product safety and environmental issues were identified during the diligence of top Tier 1 suppliers, of which the Company was not aware of all.
- Social performance: the Company had in place various practices, including safety incidents management, regular safety trainings, Corporate Medical Clinic establishment, flexible working locations during the COVID-19 epidemic, and active external stakeholders engagement. Despite efforts to create good social measure practices, specific performance issues around labour dispute and customer complaints were also identified during the DD process.

The ESG insights gathered from the due diligence process were taken into consideration during deal negotiation and the drafting of the post-investment value creation plan. The Company put forward an integrated ESG management system which covered EHS affairs, along with social performance, human rights management, and corporate governance actions.

Furthermore, the Company enhanced its supply chain management practices in order to reduce business continuity and reputational risks, using a step-by-step increase of leverage in terms of expectations and monitoring of ESG performance for suppliers. The Company also established effective channels to manage internal and external complaints, in particular related to labour issues. Post investment, the Company successfully completed its IPO within two months of investment close.

ERM continues to support the Company post completion of DD. One of the key focus areas was developing its ESG strategy through materiality assessment, incorporating the considerations from stakeholders, investors, customers and stock exchanges' ESG disclosure requirements.

Partnering with investors to operationalise sustainability

We observe that more alternative asset investors have now included ESG as a part of of their investment decision process. However, ESG has yet to be standardised due to the lack of regulation and limited ESG disclosure in private companies. These limitations pose challenges for investors' in-house ESG specialists to fully gauge the impending ESG risks and value creation opportunities.

Increased level of deal activity and operational complexity predicates the need for a partnership with experienced advisors who have local presence and experience on the ground and in-depth knowledge on how to operationalise sustainability to unlock the less apparent and hidden ESG risks and opportunities.

Finally, investors need a holistic understanding of the target's operating practices to better support and grow its sustainability strategy.



About ERM

ERM is in the business of sustainability. As the largest global pure-play sustainability consultancy, ERM partners with the world's leading organisations, creating innovative solutions to sustainability challenges and unlocking commercial opportunities that meet the needs of today while preserving opportunities for future generations.

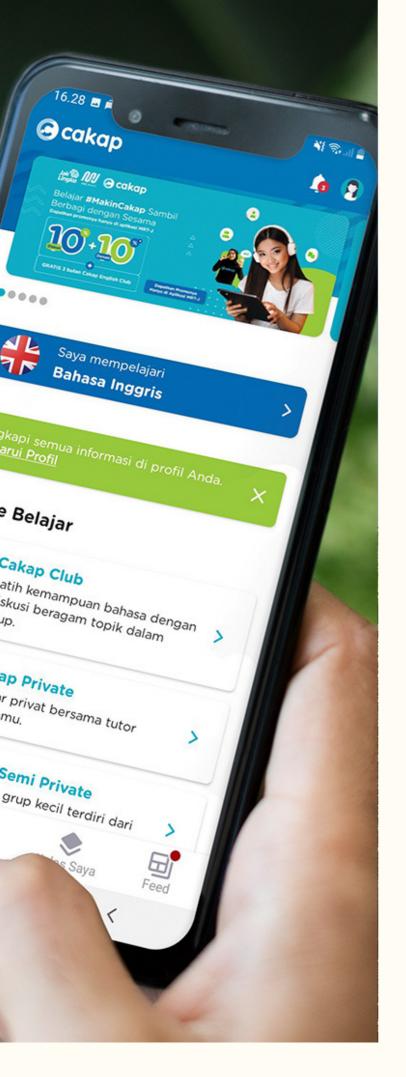
ERM's diverse team of 7,000+ world-class experts in over 170 offices across 39 countries supports clients across the breadth of their organisations to operationalise sustainability. Through ERM's deep technical expertise, clients are well-positioned to address their environmental, health, safety, risk, and social issues.

ERM has dedicated teams focusing on mergers and acquisitions and ESG due diligence, as well as ESG advisory services across Asia Pacific and globally. We take on a "boots to boardroom" approach – from conducting due diligence to providing advisory and technical solutions – enabling over thousands of transactions for investors yearly to make informed decisions, and operationalise sustainability across their portfolio of companies.









Leveraging technology and innovation to increase access to education

A case study of Heritas Capital's impact investment journey and framework, and investment into Cakap - online learning platform in Indonesia seeking to create better livelihoods for all Indonesians

CAKAP

Industry vertical: Education

Investment year: 2020

Location: Indonesia

For more information on the company

visit: https://cakap.com/en/

Cakap is founded and led by Tomy Yunus based on his belief in the value and life changing powers of education which can elevate livelihoods in Indonesia through skills enhancement. The company provides language and vocational education solutions through a dedicated platform which connects learners with experts, allowing learners to improve their skills on their terms, anytime and anywhere.

Cakap has successfully provided increased access to education to over 2.7 million learners, and contributed to improving the quality of education through empowering more than 1,600 local and international teachers trained by the rapidly growing Cakap Teacher Academy. Cakap Teacher Academy is one of the company's social impact initiatives, providing an end-to-end digital platform solution, to empower educators across the region, through training and certification, self-development and, employment within the Cakap ecosystem.

Cakap continuously contributes to the development of education across the 34 provinces of Indonesia through its online platform and cutting-edge curriculum.

"Cakap's solution looks to solve the problem of the lack of access to high-quality education, not only for students in the big cities but also for the whole archipelago of Indonesia, including third tier cities and remote areas. We are excited to be part of the digital learning transformation in Indonesia, helping to democratise access to high-quality education and elevating people's lives in the long run by unleashing the true potential of the students in Indonesia."

Tomy Yunus, Co-founder and CEO

Cakap's mission is closely aligned with the efforts of the Indonesian government to support economic recovery post the COVID-19 pandemic. Cakap represented Indonesia at the World Economic Forum 2022 and was the only Indonesian edtech startup that presented technology-based solutions to address the challenges of equal distribution of education throughout the country.

Heritas Capital's Venture Fund led the Series A+ round in Cakap amidst COVID-19 to help increase access to quality and affordable education through language and vocational skills training to both rural and urban populations in Indonesia. Subsequent round investors include MDI Ventures' Centauri Fund, Mandiri Capital's Indonesian Impact Fund, as well as Heritas Growth Fund III.



Figure 1: Cakap's Team

The Target: Inclusion for Indonesia's language & vocational education

Indonesia needs to produce at least 3.8 million new skilled workers and 1 million digital talents annually to meet its target of becoming the 7th largest economy by 2030. That target is impeded by the limited access to education and is one of the key reasons for the shortage of skilled workers. Cakap, as a one-stop platform solution for upskilling and career enhancement, acts as a bridge for Indonesians to build their competencies in various professional fields.

With Cakap Untuk Bangsa (Cakap for the Nation) as its mindset and spirit, Cakap strives to contribute to the noble mission of actualising equal and inclusive education in Indonesia. Cakap goes beyond the typical "business as usual" and sustains its services to reach future agents of change who require more assistance and affirmative action; from young professionals in urban cities, students in rural areas, people with disability, government representatives, and tourism front liners.

The Challenge: COVID-19 widening Indonesia's education gap

The COVID-19 pandemic has exposed and widened the digital divide, with 94% of learners in Indonesia losing access to education. The pandemic lockdowns have resulted in the need for home schooling, which has amplified Indonesia's existing education inequalities. Because of unequal internet access and poor network coverage, many teachers have been unable to teach effectively and to the best of their ability. This has resulted in the acceleration of technology adoption by education stakeholders. COVID-19 serves as a precursor to increasingly similar future pandemics driven by human activity and climate change, driving increased urgency to identify effective and equitable remote learning solutions.

The Solution: Leveraging technology in education to scale access and enable better livelihoods

Cakap provides online language and vocational courses through recorded videos and live sessions, leveraging on technology to bridge the access gap to education by delivering face-to-face learning alternatives. This helps solve the problem of the lack of access to high quality education, not only for learners in the big cities, but also for the whole archipelago of Indonesia, including third-tier cities and remote areas.





Figure 2: Cakap's Learning Platform & Phone Application

Various upskilling classes and initiatives have reached 350 underprivileged households in frontier, remote and disadvantaged areas. Students are equipped with skills that are practical and relevant to real-life and post-pandemic commercial realities. As many as 8,494 industry demand-related modules have been delivered through a total of 1 million hours of live learning.

From an employment perspective, Cakap has been able to better equip students to achieve financial success and improve their positions at work. A survey of users conducted by the company showed that 78% of adult students believe that they have better career opportunities, and 55% of business owners have agreed that learning with Cakap has helped them to improve their profits.

Cakap Teacher Academy has benefitted both international and local teachers, and many professional teachers from all corners of Indonesia have participated in the English teaching scholarship programme. Several graduates have succeeded in becoming teachers and joining Cakap's teaching partners.

Cakap also supports the Indonesian government's programme to accelerate the post-COVID economy, particularly in the tourism and small and medium-sized enterprise (SME) sectors through upskilling and access to language classes. Out of 64 million SMEs in Indonesia, only 17 million have been able to benefit from digitisation/ IoT opportunities - this presents an opportunity for Cakap which seeks to support deeper penetration rates for digitisation through its upskilling programmes.



Figure 3: Heritas Capital's & Cakap's Management, (left to right) Charis Goh (Head of Private Equity, Heritas Capital), Tomy Yunus (Co-founder & CEO, Cakap), Chik Wai Chiew (CEO & Executive Director, Heritas Capital), Yohan Limerta (Co-founder & CTO, Cakap), Jonathan Dharmasoeka (Chief Business Officer, Cakap)

Heritas' commitment to ESG and Impact

Heritas Capital's impact investment journey started in 2013 with a mindful decision to allocate investment capital into the healthcare industry to support impactful solutions within the sector. In line with the deliberate effort to raise awareness of and shift consciousness towards ESG opportunities over the years, Heritas Capital's investment focus has expanded to include high impact sectors such as education, environment and technology. Heritas' then formalised the integration of ESG considerations into all investment decisions in 2017 and put in place its impact investment policy in 2020, followed by the issue of Heritas' inaugural impact report in June 2022.

Having instituted a framework that involves processes throughout the full investment lifecycle, Heritas seeks to create and enhance an ever improving, evolutionary learning experience for all stakeholders by advancing the following ESG principles:

- Continually assess, mitigate and monitor ESG risks;
- Enhance ESG opportunities / impact on all stakeholders (including employees and any affected communities) and the environment, as relevant and appropriate, and monitor ESG / impact contribution to the best extent possible; and
- Review and improve decisions and processes based on the realisation of ESG opportunities / impact and lessons learnt.

Three-pronged approach

Heritas leverages on a three-pronged approach to achieve purpose and impact. Firstly, Heritas deploys an ESG framework that integrates ESG considerations into its investment processes from pre-investment to post-investment in order to continuously create and enhance an ever improving, evolutionary learning experience for all stakeholders.

Secondly, Heritas aligns impact goals and drivers with select UN SGDs, underpinned by the following three impact investment principles to formulate its impact investment thesis and the corresponding impact metrics for measuring and monitoring impact throughout the investment:

- Intentionality: to make purposeful investments with a clear and targeted impact purpose;
- Materiality: to focus on what matters the most within the impact thesis that can be meaningfully measured; and
- Collinearity: to identify and monitor impact metrics that have a strong correlation with the achievement of commercial traction and financial performance, thereby aligning impact creation with business growth for sustainable performance



Figure 4: Heritas Capital's Impact Investment Principles

Underlying Our Impact Thesis

Last but not least, Heritas' impact-in-action platform initiative, Heritas Cares, aims to raise awareness of unmet social needs and to catalyse positive impact to the community through collaborative partnerships with portfolio companies and other stakeholders. Since its launch in 2020, Heritas Cares' initiatives have helped shift collective consciousness and catalyse impact by stakeholders to create greater impact, together. For example, during the Covid-19 lockdown in Singapore in 2020 and subsequently in 2021,

Heritas worked with portfolio companies SilverConnect (GentleFoods) and Alchemy Foodtech, and other stakeholders to donate more than 6,000 bento meals to nursing homes and daycare centres across Singapore, serving those with special dietary needs such as dysphagia and lower GI respectively.



Figure 5: Heritas Cares Partnered with Portfolio Companies SilverConnect and Alchemy Foodtech to Deliver more than 6,000 Meals to Nursing Hpmes and Daycare Centres

About Heritas Capital

Heritas Capital is a Singapore-based private equity and venture capital investment firm, building a multi-fund impact investment platform that invests across the healthcare, education, environment and technology Guided sectors. by its investment philosophy, "Invest with Purpose, Impact Across Generations", Heritas Capital backs innovative companies to become emerging champions and drive inclusive growth that improves the lives of local communities and environment. while delivering sustainable returns to investors.

Read our Impact Report here:

https://www.heritascapital.com/wp-content/uploads/2022/06/Heritas-Capital-Annual-Impact-Report-FY2021.pdf









ESG's essential role in scaling a medical device manufacturer in India

Case Study of Ascent Meditech Ltd

ASCENT MEDITECH LTD

Industry vertical: Medical Products

Investment year: 2018

Location: India

Company Snapshot

- Top 3 player in orthopaedic soft goods, wound care and other healthcare products in India
- Distributes products to 140,000+ retail pharmacies across 28 states
- Over 7 million customers reached and 1,870 jobs supported in FY2022
- 90% of customers living on <US\$10/ day

Ascent is a leading vertically integrated consumer healthcare products business in India, underpinned by a 30-year old brand ('Flamingo') and a wide distribution network.

The investment in Ascent was in line with LeapFrog's distribution-focused healthcare strategy predicated on improving access to quality, relevant and affordable healthcare products and services. The company has a deep and wide distribution platform, accessing more than 140k retail points in India and over 40 export countries, of which a majority are emerging markets in Asia and Africa. LeapFrog acquired a majority stake, partnering with a driven founder and CEO, with an aligned vision to continue to grow the business in India and internationally. Further information can be found at: https://ascentmeditech.com/.

Integrating ESG into the investment lifecycle

Impact and ESG are embedded throughout the entire investment cycle, from screening and diligence through to transaction execution, value creation and exit.

- 1. Initial Screen: E&S Risk Categorisation for a pipeline company is completed as early as the initial screen stage, and detailed Impact and ESG due diligence, impact base and upside cases, and 100-day E&S Action Plans are included in all IC papers;
- 2. Due Diligence: If a potential investment is categorised as medium or high risk from an E&S perspective, further diligence is conducted through engaging LeapFrog's trusted network of external ESG consultants;
- 3.Closing: LeapFrog's commitment to ESG is demonstrated in formal commitments to LPs and in legal covenants with portfolio companies companies sign on to our RIC post-closing

Developing a proprietary impact measurement framework

As a Profit with Purpose investor, LeapFrog has developed an integrated performance measurement framework to measure and implement Profit and Purpose. Key components include:

- Proprietary methodology called FIIRM (developed and implemented by LeapFrog over the past 15 years): Measures Financial performance, Impact, Innovation, and Risk Management in an integrated way, and has been included in the Global Impact Investing Network's ("GIIN") Impact Reporting and Investment Standards ("IRIS+");
- Consumer Insight (CX) (direct interaction with emerging consumers to understand their experience of using products and services).

FIIRM and Customer Experience provide a rich dataset of financial and non-financial indicators, incorporating and frequently enhancing other global standards. Further impact commitments are documented in our Responsible Investment Code (RIC), an overarching environmental and social policy that align with internationally recognizable norms (IFC Performance Standards, UN Global Compact Principles. OECD **Principles** for Corporate Governance, etc.) and guide LeapFrog and its portfolio sound companies to achieve environmental and social performance.

4.Reporting & Management: Each company completes annual ESG surveys, which measure companies' governance, product quality, and risk management, and are analysed and followed up by LeapFrog's Impact team. LeapFrog ensures that the requisite governance, at executive and board level, and monitoring bodies are developed within portfolio companies to track all ESG and impact metrics that are material to company.

LeapFrog builds relationship with the management of portfolio companies on an ongoing basis and collects sustainability indicators on a quarterly and annual basis. LeapFrog seeks at least Observer representation on a portfolio company's board in every business. LeapFrog believes that this representation and contact, alongside portfolio companies' formal commitments to LeapFrog's RIC, gives strong influence over ESG factors.



Figure 1: Flamingo Product

Ascent ESG due diligence

At the due diligence stage, LeapFrog reviewed Ascent's environmental and social policies, labour relations, employee review processes. community stakeholder relations, and other key ESG systems in depth, in order to assess the environmental, health and safety and community risk and impact of the company's operations. LeapFrog also assessed Ascent's performance against international best practice (including OECD Principles of Corporate Governance) and LeapFrog's Responsible Investment Code, which incorporates the UN Global Compact Principles and the ILO Declaration on Fundamental Principles and Rights at Work.



Figure 2: Recovery Progress

ESG related engagement: Improving manufacturing and labour standards to comply with IFC Performance Standards

During the due diligence process, LeapFrog's healthcare deal team identified supporting Ascent with constructing and launching Ascent's new manufacturing facility as a key value creation driver for the company. Ascent already had four manufacturing units compliant with local regulations and FDA and ISO certifications but required capital for a new plant to scale sales and distribution. As any ESG controversies regarding the setup and operations of the facility would materially affect the company's revenue growth potential, a key ESG priority was identified as bringing the company's labour practices and manufacturing facility up to global standards.

Key ESG Initiatives

LeapFrog supported Ascent on all ESG aspects throughout the project lifecycle, from land acquisition to site construction, setting working conditions, and commencing operations. Post-closing, the team completed a project with an external consultant on labour and contractor best practices, working with the board and senior management to execute on ESG action items relating to labour and construction of the new facility. Key outcomes included:

- Ensuring compliance of all land acquisition with IFC Performance Standards 5, 7, and 8, and associated World Bank (WB) Group's Environmental, Health and Safety (EHS) Guidelines,
- Providing workers with appropriate work equipment and working conditions,
- Developing an Environmental, Health and Safety Management System (EH&SMS) that enables the management to standardise implementation,
- Updating Ascent's HR Policy to align with national labour laws and international standards, and conducting quarterly employee trainings to impart occupational health & safety awareness



Figure 3: Ascent Products

Supporting implementation of ESG practices

To ensure continuation of best practices at the new manufacturing facility, LeapFrog supported Ascent in appointing a project manager with 30 years of experience in manufacturing at a leading private and government organisation. A full E&S Impact Assessment was also commissioned in 2020 to ensure full compliance with original ESG goals and outcomes. Actions were taken to ensure overall improved corporate governance as well, such as institutionalising board and audit committee meetings, regular disclosures to the Board and Committee, and adoption of Anti Money Laundering and Anti Bribery & Corruption Policies. From FY 2018 to 2022, Ascent's Good Governance & Policy Score (a LeapFrog-specific ESG score calculated from our Annual ESG Survey) has increased by 20 percentage points.

ESG & Value Creation

In FY2022, Ascent successfully moved to the new manufacturing facility and has since shifted most of their operations there. Beyond compliance to local and IFC Performance Standards, the new plant has led to new customers and sales channels, including a strategic partnership with Sigmax, a leading Japanese orthopedic player. Alignment with international standards has also made Ascent an attractive asset for future potential strategic buyers and buyout funds.

Key Takeaways for ESG in India

LeapFrog's intensive ESG engagement with Ascent on this front has taught us some valuable lessons:

- Integration of local processes: To ensure buy-in and implementation, it is important to adopt processes that are practical for the local market. In this case, common engagement practices in India were adopted, e.g. anonymous grievance boxes, inviting village members for feedback when assessing the impact of the new manufacturing unit on the surrounding community, etc.
- Partnering with local ESG consultants: To effectively drive engagement, it is also critical to engage quality, trustworthy on-the-ground ESG consultants to support the execution of our ESG due diligence and action plans.

About LeapFrog Investments

LeapFrog invests in exceptional businesses in Africa and Asia, partnering with their leaders to achieve leaps of growth, profitability, and impact. Founded in 2007, LeapFrog's portfolio companies now reach 342 million people across 30 countries with healthcare or financial services. LeapFrog portfolio companies have also grown on average at 26 per cent annually from the time of investment. They now provide jobs and livelihoods to 159,000 people. Inspired by LeapFrog's strategy of Profit with Purpose, LeapFrog has raised over US \$2bn from global institutional investors, including \$500m recently committed by Temasek to LeapFrog and its future funds. LeapFrog was ranked by Fortune as one of the top five Companies to Change the World, alongside Apple and Novartis, the first private investment firm ever listed.









ESG in a leading tech-enabled F&B chain in Indonesia

JIWA GROUP

Industry vertical: Food & Beverage

Investment year: 2021

Location: Indonesia

Openspace's ESG Approach

Openspace believes that strong ESG management practices contribute to superior long term business performance, and that all investments should be done with a deep responsibility to the communities that we operate in. As such, we factor in ESG considerations (including management of environmental impact. labour practices and corporate governance) throughout our investment process, from due diligence to post-investment monitoring and exit. We do so in line with IFC Performance Standards, ILO Core Conventions, and the World Bank EHS Guidelines, as well as with reference to SASB industry profiles and BII sector profiles.

In addition to bringing in third party consultants to supplement our due diligence where necessary, we also actively engage with our portfolio companies after our investment to ensure that ESG action items are followed up on.

These have included Environmental and Social Management Systems, a tightening of HR management practices, implementation of employee satisfaction surveys, waste mapping initiatives and the establishment of senior-level risk management committees.

We have already seen our work in this space begin to deliver value across multiple dimensions including better talent retention, stronger follow-on interest, and a broadening of exit paths.

In June 2021, Openspace became a signatory to the UN-supported Principles of Responsible Investment and will begin voluntary reporting in 2023. Our approach to ESG and Impact is described in detail in our 2021 Sustainability Progress Report available **here**.

About Jiwa Group

Jiwa Group ("Jiwa") is the fastest growing quick services F&B chain in Indonesia with a focus on graband-go coffee, toast, and tea. Coffee consumption in Indonesia has shifted from functional need to social experience and Jiwa has captured this mass-market opportunity with their wide product selection with their wide product selection and competitive pricing. Since 2018, Jiwa has focused on rapid expansion via a franchise model with low capital requirements. The company successfully franchised over 820 locations nationwide and opened over 100 company-owned stores in Java within its first three years of operation. Under the franchise model, franchisees pay a fixed monthly fee per store and are also charged a margin on the pre-opening equipment and raw materials provided by Jiwa.

In mid-2021, the Company refocused its strategy from rapid expansion to high quality services at affordable prices and shifted its original franchise model into a company-owned stores operating model to increase brand consistency and drive higher margins with scale. The company also doubled down on digitalization for both front- and back-end with the development of their in-house ERP and launch of Jiwa+.

Today, Jiwa employs about 2,400 people and has over 1,000 total outlets across Indonesia, of which over 350 are company owned, and it sells through various channels including their offline quick service stores, online via the inhouse Jiwa+ application, and through food aggregators, to reach a wider consumer pool.



Figure 1: Jiwa Employees Packaging Coffee Beans

Improving ESG practices – from Diligence to Post-Investment

Openspace invested in Jiwa Group ("Jiwa") in 2021. The company was founded in 2018 and is the fastest growing coffee and toast food & beverage chain with approximately 1,000 locations in Indonesia and about 2,400 employees.

When the opportunity was first discussed at our weekly deal review committee, we assessed it to ensure there were no conflicts with our exclusion list, available publicly here. No red flags were raised regarding primary business activities, industry or founder backgrounds.

Deeper diligence was carried out post-term sheet, with Openspace and co-investor Capsquare Asia jointly engaging a third-party expert environmental and social (E&S) consultant to assess existing risks and mitigating systems in place given the scale of the business and presence of known operational risks in the F&B business. They did so through site visits and documentation reviews. We also conducted detailed background checks on founders and found they were well-regarded, with no reputational or integrity issues. This diligence was also supplemented with legal and financial diligence by renowned third-party firms.

The investment committee took material ESG factors and necessary mitigating actions into account in its decision to invest, and ESG commitments were included into the Shareholders Agreement (SHA) covering, inter alia, governance policies and labour practices as well as the implementation of other gaps identified by Openspace over the course of our due diligence. Our SHAs typically also include a commitment to produce a yearly ESG report.

Following our investment in Jiwa in Oct 2021, Openspace has since worked closely with the company to achieve the following:

Environment

Given its primary business activity is F&B, Jiwa will be undertaking a waste mapping exercise involving the collection and analysis of longitudinal samples from representative stores in order to develop baselines for waste volume and composition.

This will be followed by an exploration of potential channels to reduce waste-to-landfill. It has also implemented resource efficiency policy guidelines and will work on developing a baseline of key metrics including electricity and water use in order to inform actions and measure outcomes moving forward.

Social

In support of a conducive working environment, the company formed a bipartite committee and has revised its Company Regulations to explicitly allow workers to form workers' organisations. It has also included policies on non-discrimination and equal opportunity in its Company Regulations, and established sex-segregated toilets in its roastery, bakery, warehouse and stores.

The company has also upgraded its employee grievance mechanism to include a process and timeframe for resolution which is extended to all third-party workers as well; and enhanced its systems to ensure timely and documented conversion of staff from contract to permanent staff, with more than 10 staff converted on a monthly basis.

Within 2 months of the Openspace investment, Jiwa had completed an OHS risk assessment which will be done every three years moving forward. It also installed appropriate emergency exit signage, developed an emergency preparedness and response system for emergency scenarios, and commenced quarterly training. It has since conducted over 2,000 hours of training for 700 participating staff. In addition, it has designated specific staff for the management and monitoring of EHSS and now provides annual refresher training to all staff on OHS.



Figure 2: Training

In terms of stakeholder management, Jiwa has invested in a data-driven, real-time customer feedback system which has improved response and resolution times by over 3x, boosted its NPS score from 25 to 60, and increased its satisfaction score from 64 to 76 within two months of rollout. Its feedback channels are advertised through its social media accounts as well as via stickers in their outlets.

Governance

Jiwa has established an overarching Environmental and Social Management System addressing environmental and labour risks and opportunities in their business activities, with oversight by a newly convened internal ESG Steering Committee headed by Jiwa's CEO. It is also seeking a dedicated ESG hire with a job scope that takes into consideration Jiwa's existing organisational skill sets as well as its ESG roadmap in the next 2-3 years.

Externally, Jiwa has enhanced its franchise and supplier agreements to include ESG clauses, including labour practices (e.g. ensuring payment of minimum wages through monthly reports) and environmental management. It is also rolling out a vendor code of conduct.

Jiwa, under the guidance of a strong CFO, developed clear documentation around financial authority limits and cash management which mitigate AML/CFT risk. The company also runs well-structured, detailed, quarterly Board meetings in which Openspace contributes actively as a Board member in addition to our frequent working-level interactions.

Jiwa may be in the early days of its ESG journey, but its management has delivered on their intentions by committing timely and appropriate resources to develop and implement key policies. We are proud of the company's progress and will continue to work with them to further enhance processes and move towards measurable progress in alignment with international industry best practices.

Material ESG factors included:

- Environment (including in supply chain)
 - Resource efficiency
 - Pollution prevention
- Social (including in supply chain)
 - Human resource policies & working conditions
 - Occupational health & safety
 - Workers' organisations
 - Non-discrimination and equal opportunity
 - Workers engaged by third parties
 - Stakeholder management and communication

Governance

- E&S policy and management programmes
- Organisational capacity and competency
- Emergency preparedness & response
- Financial management
- Board oversight
- Cybersecurity

About Openspace Ventures

Founded in 2014, Openspace manages 5 funds with total committed capital of over US\$650 million from institutional investors around the world. We operate out of offices in Singapore, Jakarta, Bangkok, Manila and Ho Chi Minh City with a team of 34 people across 12 different nationalities. With a singular focus on Southeast Openspace invests in early- to mid-stage technology companies across the region that create a transformative impact where tech meets life. We have three core funds focusing on Series A/B opportunities, an Opportunity Fund (OSV+) and a Web3 Fund (Ocular).

The Openspace Funds are ranked top quartile according to Cambridge Associates global benchmarks and have invested in 46 companies across the region including GoTo (formerly Gojek), Halodoc, Biofourmis, FinAccel, TradeGecko, Kumu, Whispir and Pluang. We believe in investing with active intelligence, utilising a data-driven and onthe-ground approach to source and create proprietary opportunities.









Delivering affordable high-quality healthcare in India

A case study of Asian Institute of Gastroenterology (AIG)

AIG

Industry vertical: Healthcare Delivery

Investment year: November 2015

Investment status: Realised

Location: India

For more information on the company

visit: https://aighospitals.com/

Company Snapshot

- 350,000+ patients served annually
- Key procedures priced at 15-20% less than competition
- Over 10,000 surgeries, 90,000 endoscopies and 100+ liver transplants performed annually
- World's largest single-site gastric sciences hospital
- 1300+ new jobs created in 2021
- Over 53% female employees as part of the workforce
- Over 9000 hours of training annually to onroll staff

AlG is a global center of excellence and one of Asia's leading referral center for Gastric Sciences. It performs amongst the largest number of interventional procedures in India in gastric sciences and is amongst one of 21 centres recognised globally as a Centre of Excellence by the World Endoscopy Organisation. The hospital serves over 350,000 patients annually delivering a large number of complex procedures with superior clinical outcomes.



Figure 1: Hospital Building

It is affiliated with reputed global institutes such as the Mayo Clinic, Imperial College of London, Johns Hopkins Hospital and National University Hospital Singapore and has trained over 1,000 doctors from some of the leading healthcare chains globally. AIG offers teaching and training programs and in the last one year it awarded 12 DNB and 5 PhD degrees. 100% gastric sciences doctors of Myanmar and ~50% gastro sciences doctors in Indonesia have received training at AIG at some point in their career. AIG is accredited by Joint Commission International (JCI), National Accreditation Board for Hospitals & Healthcare Providers (NABH), and National Accreditation Board for Testing and Calibration Laboratories (NABL) and is the only Indian hospital and only single specialty hospital globally to partner with Mayo Clinic.

Background and ESG Initiatives undertaken

Being a doctor run hospital, which had grown organically over the years, management's understanding of ESG risks was limited and systematic planning, execution, evaluation, and correction of the ESG aspects in the operations were not being carried out.

While the hospital was following basic functional processes, across the critical Environment, Health & Safety areas, such as in biomedical waste management, emergency preparedness and fire safety, most of the processes were not comprehensive. There were no clearly defined roles and responsibilities to handle health and safety risks and resource efficiency measures.

Quadria's long-term investment and partnership resulted in building the foundation of the hospital with the right set of ESG values integrated within its operations enabling access to high quality and affordable healthcare.

Our firmwide ESG framework and management system helped in identifying material ESG issues in due diligence which were aligned to the requirements of IFC Performance Standards and relevant EHS guidelines, ILO's Declaration on Fundamental Principles and Rights at work and the ILO's Basic Terms and Conditions of Employment. An ESG value creation action plan was agreed between the company and Quadria during the ESG due diligence phase and compliance to the action plan points was ensured within the timeline of one year. Further, AIG implemented initiatives to meet agreed upon ESG related key performance indicators and action points agreed at the time of ESG due diligence.

Being committed to sustainable growth, AIG established management systems which integrate quality with ESG. These systems along with an experienced team ensured efficient coverage of patient care, hospital infection control, facility management with safety and emergency preparedness, HR management and information management.

AlG further recognised that being a responsible corporate citizen required a commitment to conscientious environmental practices and established specific objectives and targets to continually reduce environmental impact where possible. Some of the identified areas include:

Health and Safety: AIG ensures a continuous drive for health and safety management especially fire prevention and security enhancements. institutionalised an employee health and safety policy with the objective of ensuring that all employees and workers who are inducted are aware of health and safety practices and strive towards zero incidents at workplace. There has been a significant reduction in the number of incidents and no serious incidents being reported during the last year. The policy also mandated annual health check-ups of doctors, nurses, and technicians. Other important policies which were introduced include grievance redressal policy, uniform policy, attendance policy, policy on induction and training and staff discount policy.

Implementation and training on these ESG and health and safety related policies have helped enhance employee motivation, morale, and improved workforce productivity.

Resource Efficiency: AIG implemented policies to reduce the adverse impact of waste generated during its operations, including recycling of wastewater and treatment of hazardous waste before disposal.

The hospital implemented a zero-waste water discharge policy and ensured that 100% of the wastewater generated at the new facility is treated at the Sewage Treatment Plant and recycled for use in landscaping, washing of basement parking and other external areas. Usage of recycled water for cooling tower resulted in a saving of ~70 KL water per day.

Energy and water consumption: AIG implemented a building management system that allowed them to manage and conserve electricity at the facility. Previously all the energy demand was met by grid and diesel generator sets. However, since 2021, over 80,000 KW of annual energy demand of the hospital was met by renewable energy with the hospital using solar panels and Grunfoss system for hot water supply instead of diesel fed hot water generators resulting in reducing power usage by 4000 units per month. The company is on an accelerated path of transition by introducing more such measures after seeing a positive correlation between resource efficiency and cost effectiveness.



Figure 2: Solar Panels

Social Impact through improved access and affordability

Due to its strong relationship globally with doctors, 50% of its patients are referred from the doctor network solely on the back of AlG's reputation of clinical excellence. As many patients are unable to afford medical care, AlG has served over 30,000 patients in 800+ villages in India during the last year through its mobile van and health camps. It further provides over 3900+ bed days per annum which are free of cost. Further, AlG has consistently been focused on delivering affordable quality care by pricing the key procedures at least 15-20% lower than to the competition.

Promoting diversity and equal opportunity

AIG employs over 4100 employees and women makeup about 50 percent of the total work force. It achieved clear progress towards increasing the diversity of its team over the years and focused on the representation of women and minorities in management. Some initiatives introduced during the year include providing employee health insurance for all staff, assigning a workplace buddy for newly inducted employees and special allowance for nurses working in non-COVID wards. Diversity was ensured at the Board of Director level with one of the directors being a woman.



Figure 3: Women Employees

Community Initiatives For Better Health Outcomes

AlG conducted many purpose-driven community outreach and Corporate Social Responsibility (CSR) activities throughout the year including serving very low-income patients in over 800 rural villages in India. Some other initiatives undertaken include providing training to local community and local security team on how Basic Life Support needs to be given to anyone who is experiencing cardiac arrest, respiratory distress or an obstructed airway.



Figure 4: Telemedicine Unit

About Quadria Capital

Quadria Capital Is an independent healthcare-focused private equity firm with assets under management of approximately US\$2.7 billion. The funds targets high growth healthcare companies in South and Southeast Asia that possess strong market leadership, potential for sustainable revenue and margin growth as well as strong and aligned management teams.

Quadria is led by a long tenured team of seasoned investment professionals with extensive experience in clinical services, healthcare management and investments. The Firm's leadership team has worked together for more than 12 years, including in prior roles. With local hub offices in Singapore and New Delhi, Quadria Capital and its team of 33 professionals has one of the largest healthcare-focused investment professionals in Asia. The Firm's differentiated skills underlie Ouadria Capital's ability to originate proprietary deal flow, conduct rigorous due diligence and add value and drive growth in portfolio companies.









Integrating climate change considerations in the investment process

Urgency to act on Climate Change

Climate has taken centre stage when shaping Temasek's long-term sustainability strategy. As a longterm investor creating value for future generations, Temasek recognises the critical role it has to play in supporting the successful transition to a net zero carbon economy by 2050. As part of our commitment, Temasek became а supporter recommendations of the Task Force on Climaterelated Financial Disclosures (TCFD) in September 2020. We have also articulated commitments to reducing emissions by taking reference from the latest scientific understanding as well as the resulting imperatives required to limit global warming to 1.5 degree above pre-industrial levels:

- Achieve carbon neutrality as an institution by 2020 (completed)
- Halve portfolio net carbon emissions over 2010 levels by 2030
- Work towards a net zero emissions portfolio by 2050 [1]

"While the future remains unpredictable, we recognise that there is tremendous scope to work together to overcome global challenges, and to harness the power of public and private sectors to achieve a better, more sustainable, and inclusive world."

Lim Boon Heng, Temasek Chairman

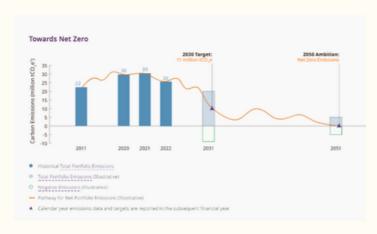


Figure 1: Temasek's Net Zero Ambition

[1] Temasek, Catalysing Climate Action, 2022

Temasek's Approach to Integrating Climate Change Considerations

To systematically amplify the outcomes from our climate action goals and accelerate progress towards these portfolio targets, Temasek has introduced climate considerations as part of our ESG framework across our portfolio and investment activities. The analysis is mandatory for all new investments brought forward for evaluation by our Investment Committee. It examines climate impact from several perspectives:

- the potential investee company's contribution to climate change through its carbon footprint.
 Calculation of Scope 1 and 2 is completed for all investments (with analysis of Scope 3 to be completed where material);
- the impact of climate change as a result of physical and transition risk which factors in the company's adaptation capabilities to physical risks, potential abatement and their market impact and
- any potential new commercial opportunities arising from technology innovations as well as evolving customer needs that reflect higher consciousness around sustainability.

A range of absolute and relative metrics is employed in the analysis and contributes to the evaluation of climate considerations and investment decision-making. These metrics include total carbon emissions and ratios, such as carbon intensity and carbon efficiency, which help investment teams evaluate the impact of the new investment on portfolio targets. In addition, the investment teams conduct an annual climate risk analysis as part of the ongoing asset-level reviews within their coverage.

To deepen ESG and climate integration as well as support the investment teams, the ESG team expands and upgrades the tools and training options on a regular basis. One example of that would be the introduction of an internal carbon price (ICP) of US\$50 per tonne of carbon dioxide equivalent. ICP is a tool which supports decision making which is in line with our climate targets by enhancing the understanding of the possible future impact of carbon pricing on the investments that we make. It also creates awareness of the societal costs that emissions and resulting climate change can impose in the long run. It is our intention to raise this progressively to US\$100 by 2030.

Case Study: Climate Analysis for Automotive Co. (illustrative example)



Figure 2: Climate Analysis Adapted from Daimler Sustainability Report 2019 | Climate Protection and Air Quality (p. 98)

Overview of Business

Automotive Co. is a publicly-listed company in emerging markets with a leading market share in the passenger vehicle segment. Automotive Co. has a broad product portfolio ranging from compact entry-level cars to luxury sedans. It operates manufacturing plants located in its country of domicile. Most of the electricity used in the manufacturing process is generated by Automotive Co.'s own gas-based captive power plant, with very little amount consumed directly from the grid.

Implementation of Climate Analysis

As a first step in the analysis, the investment teams look to evaluate the type and nature of emissions across the full value chain of the automotive company. Analysis of the emissions of the commercial activities under operational control (scope 1 and 2 emissions) is completed by the deal teams for all new investments leveraging on a tool with data provided by an external emissions data vendor. Teams include an overview of upstream supply chain, downstream product and end-of-life emissions (scope 3) for companies where those emissions are materially significant.

For automotive manufacturers, scope 1 and 2 emissions form only a small portion of overall emissions and the majority of the emissions are concentrated in the use phase (scope 3). Therefore, the analysis does capture scope 1 and 2, but has scope 3 in usage phase of the vehicles as a critical component to understand the company's climate readiness and forward looking strategy. Precise quantification of scope 3 impacts is challenging as disclosure data can be limited for many enterprises. In order to overcome data constraints, estimates and proxies are used in order to derive an overall understanding of the company's positioning, particularly relative to peers.

When investment teams assess the emissions performance of their investment targets, they look to connect those insights with the associated commercial and operational considerations for the business for example:

- Nature and specific details around the industrial manufacturing process;
- Operational practices and ongoing operational efficiency measures;
- Sources of energy to power up the manufacturing plants and
- Fuel consumption and emissions profile for Automotive Co.'s largest product portfolios.

After the investment teams have collected the absolute numbers, they calculate carbon metrics, which helps to build a more holistic analysis and understanding of the company. Carbon metrics are commonly used across the investment industry and include ratios such as:

- Apportioned emissions: measures the contribution of investment to total portfolio emissions based on the equity stake and total scope 1 and 2 emissions of the company
- Carbon intensity: evaluates whether the investment will have accretive or dilutive impact on the portfolio carbon intensity, measured as equity-adjusted tons of CO2 divided by the market value of the stake
- Carbon efficiency: helps to compare the carbon performance of the company relative to its peers using metrics such as carbon efficiency which can be expressed in unit of dollars revenue or tCO2e per vehicle produced.



Figure 3: Automotive Assembly line

To supplement the analysis and build a more holistic understanding of the climate-related risks and opportunities for the automotive company, the investment analysis would also try to understand the emissions profile of the company's fleet portfolio (scope 3). This is quite an essential consideration for vehicle manufacturers as government regulations, market infrastructure, and the growth of the electric vehicles market have significant influence on long-term growth dynamics and competitive positioning.

In addition to mitigation analysis, the investment teams also conduct a climate adaptation analysis, also called physical risks analysis. This analysis includes identifying the potential medium to long term climate hazards based on the geo-location of the company's manufacturing plants. This could include extreme weather events such as flooding, droughts or hurricanes. In some cases, the write-up will also include an assessment of transition risk. For automotive companies, this will include upcoming regulatory changes around transport emissions as well as the changes in consumer preferences for fuel efficient, less pollutive modes of transportation, including electric vehicles.

The climate analysis goes hand in hand with the rest of the ESG analysis as part of the evaluation of new investment opportunities and preparation for a review by the Investment Committee. The key ESG and climate insights aggregated in this stage of the process form an important part of the post-investment monitoring and engagement with the company's management. They enable and support the efforts in building and nurturing best in class practices for our portfolio companies and preparing them to be future-ready.

About Temasek

Temasek is a global investment company headquartered in Singapore. We are a generational investor, seeking to make a difference always with tomorrow in mind. We are committed to our mission to generate sustainable returns beyond our present generation and are guided by the principles of our Temasek Charter.

Temasek at a Glance

- Year Founded: 1974
- 12 offices across 8 countries
- Net Portfolio Value S\$403B (as at Mar 31, 2022)
- Four structural trends shaping our portfolio construction: Digitisation, Sustainable Living, Future of Consumption, and Longer Lifespans





