

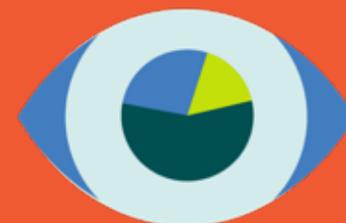
Munich Venture Partners

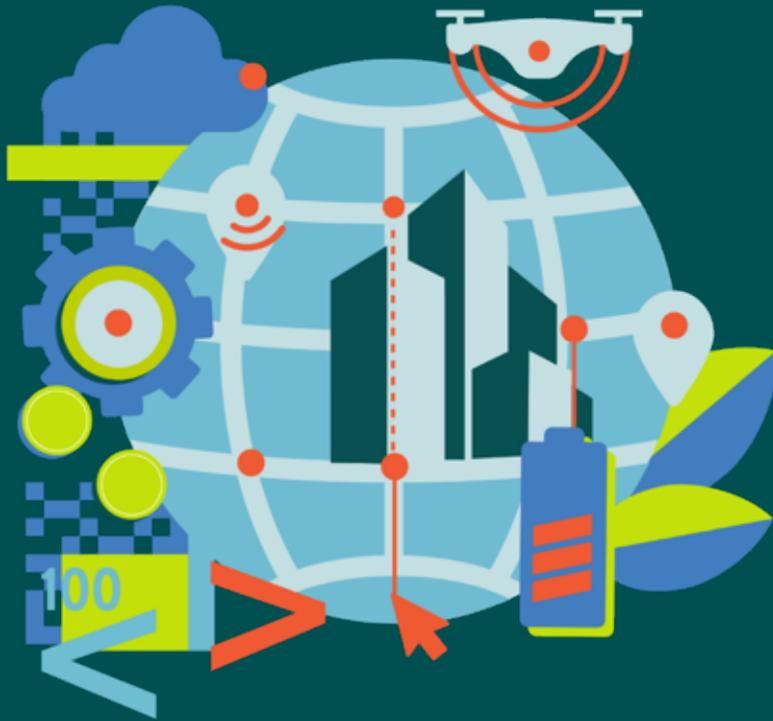
Sustainability

Report

2020

MVP





Driving the eco-industrial revolution



MUNICH VENTURE PARTNERS

Munich Venture Partners (MVP) is a high-tech venture capital specialist based in Munich. As an independent venture fund, MVP concentrates on investments for leading-edge startup companies with Transformative Technologies, which will fundamentally transform established value chains. Our commitment focuses on Europe and on selected international investments. Relevant sectors include: IoT, Mobility, Energy, Advanced Materials, Artificial Intelligence, and Robotics.

MVP was founded in 2005 and is partly funded by the European Union and its Competitiveness and Innovation Framework Programme (CIP).

Read more at www.munichvp.com

AGENDA

1. OUR SUSTAINABILITY APPROACH



2. OUR PORTFOLIO'S ESG PERFORMANCE



3. LONG-TERM ORIENTATION TOWARDS THE SDGs



4. IMPLEMENTING THE TRIPLE TOP LINE APPROACH



Our approach towards sustainability

As institutional investors, we have a duty to act in the best long-term interests of our stakeholders. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) matters enhance the performance of our portfolio companies and represent three central components to measure the sustainability of our fund.

As a signatory of the UN Principles for Responsible Investment (UNPRI), Munich Venture Partners (MVP) has a longstanding history in measuring the impact of its portfolio. On a yearly basis, we evaluate the ESG performance of our portfolio companies through company specific key performance indicators (KPIs). Our tool is routinely adapted to the latest regulatory measures, existing technologies, and the development of our portfolio companies. The data gathered is transferred into our reporting tool which gives us objective statistics and a comprehensive overview about the ESG compliance and progress of our portfolio companies.

Besides learning a lot about our investees' operations, our ESG experience also taught us why ESG is a perfect tool for negative screening and early risk identification but lacking in outlining the whole impact of our portfolio. Particularly by primarily focusing on past performance, ESG neglects the huge potential of such early-stage companies.

Unlike ESG - which guarantees an undisputable level of sustainability, the UN Sustainable Development Goals (SDGs) are more output oriented and illustrate how investment decisions impact the broader environment and society. As we believe this better reflects the fast-paced and future-oriented Venture Capital sector, we decided already in 2018 to go beyond the standard ESG approach and linked the E/S/G KPIs we have been tracking to the SDGs, guiding our investees towards long-term orientation and focusing on the road that lies ahead.

However, we see a rising need for an assessment framework which can deal with individual requirements, may it be startups, venture capitalists, or fund investors, the complex structure of the SDGs, and - above all - their holistic nature, meaning that all goals must be achieved in unison.

We believe to have found the solution in the Triple Top Line. The Triple Top Line aims for a sustainable industrial system, generating economic returns while enhancing nature and society. Rather than balancing economic, environmental, and social equity targets, the Triple Top Line employs their dynamic interplay to concurrently generate value on all pillars. The last chapter of this report elaborates how we adapted the Triple Top Line approach to the Venture Capital world and how it enables quantifiable and holistic contribution to the SDGs.



Our portfolio's ESG performance in 2019



The MVP ESG Process

1. DEFINE THE RELEVANCE

- > Internalize environmental and social concerns to measure the sustainability of our fund
- > Help portfolio companies to understand and communicate their environmental and social value

2. CHOOSE THE METRICS

- > Determine which ESG factors to focus on and how to measure them
- > Evaluate the ESG performance of our portfolio companies through company-specific KPIs

3. MITIGATE RISKS

- > Statics gained through our reporting tool facilitate an early-stage risk identification
- > Minimize the likelihood and the potential negative impacts of ESG-related risks

4. ADAPT TO EXTERNALITIES

- > Monitor the environment for changes that affect the performance of our companies
- > Routinely adapt our tool to the latest regulatory affairs and the progress made so far



ESG PERFORMANCE

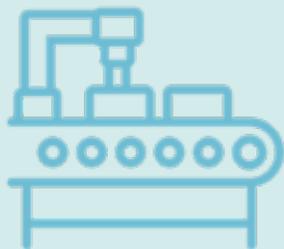
Environmental Aspects

We, as MVP, put great attention to our portfolio companies leaving the lowest environmental footprint possible. We go even further by fostering that our investees make our planet better. Therefore, environmental issues play a central role in our reporting.

The environmental part of the questionnaire focuses on following topics:

- > Reduction of CO₂ emissions enabled by the company's technology
- > Total CO₂ emissions across the value chain
- > Energy usage and energy intensity ratio
- > Number of energy efficient households created and/or connected
- > Conduction of environmental risk assessments as well as the implementation of a climate resilience strategy
- > (Recycled) materials used as inputs in the manufacturing process
- > Total amount of (non-)hazardous waste
- > Water usage
- > ESG related R&D expenditures
- > Number of new patents on environmental aspects
- > Number of agricultural clients and approximate increase in food production enabled by the company's technology

ESG Performance - Environmental Aspects



71%

average capacity utilization

by **52%**

increased spendings on
maintenance & safety of
production sites*



371%

increase in energy
efficient households
managed by portfolio

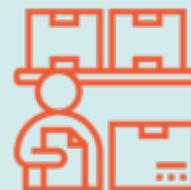
> 30,000t

avoided by three
investees



kEUR 6,473

ESG related research &
development expenses



100%

of reporting companies
reduced the percentage
of sourcing from 3
biggest suppliers



63%

conducting
environmental and
social risk assessments



ESG PERFORMANCE

Social Aspects

The factor „social“ represents another central issue of responsible investing. In the 21st century, this means fighting against discrimination of any kind, equal opportunities for all employees, fair remuneration, and a healthy work-life-balance – to name only some of the central aspects.

We are convinced that these standards must be implemented in each of our portfolio companies, also because a good working environment increases retention rates and enhances shareholder value in the long-run.

Furthermore, by establishing the reputation of an attractive employer, our investees receive more applications and recruitment is comparatively easier and less costly.

Among others, MVP focuses on the following social KPIs:

- > Maturity of workforce
- > Human rights and discrimination incidents
- > Remuneration system
- > Expenses on employee training and career development reviews
- > Law-suits against our portfolio companies

ESG Performance - Social Aspects



1,189
total jobs created

435
thereof within the
active portfolio

30%
thereof women

94
jobs created in
2019



Total bonuses amounting to
kEUR 1,265

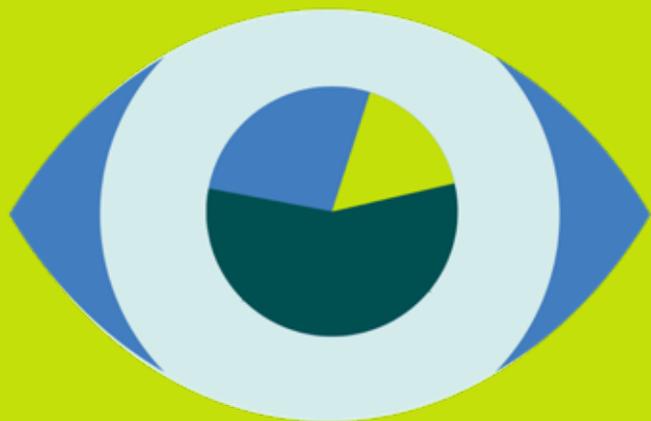
Received by employees (37%)
162



0
incidents of
discrimination

77%
of investees' employees
receive regular performance
& career reviews

67%
investees have an
employee feedback
system



ESG PERFORMANCE

Governance Aspects

In terms of governance, Munich Venture Partners gives special attention to board and management compositions – no discrimination based on a person’s gender, age, race or any other kind of preferences when it comes to management and board positions – as well as preventing and fighting corruption. In addition, we track following metrics:

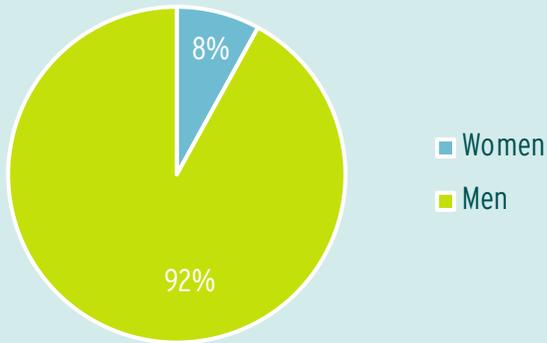
- > Sanctions resulting from non-compliance with laws
- > Financial assistance received by governments
- > Total monetary value of financial and in-kind political contributions made directly and indirectly
- > Significant fines and non-monetary sanctions
- > Presence of government in the shareholding structure

These data serve as basis for MVP to monitor that its portfolio companies are governed responsibly and reputably.

MVP proudly announces that repeatedly no cases of corruption have been reported and no governance related suits against any of its portfolio companies have been filed.

ESG Performance - Governance Aspects

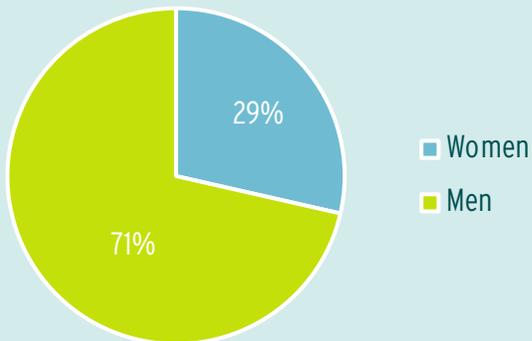
Advisory & supervisory boards



5
board meetings per
year on average

14%
independent board
members

Management teams



0
incidents of
corruption



0
significant fines and
non-monetary
sanctions



0
non-compliance with
laws in the field of
governance

The MVP ESG Champion



Some of last year's highlights include:

- › Decrease in energy intensity
- › Decrease in water intensity
- › >30% increase in ESG related R&D expenses
- › Increase in spending on maintenance & safety of production sites
- › Decreased dependency on suppliers
- › Publicly available CSR & environmental policy
- › Publicly available product life cycle analysis
- › Publicly available CO₂ study
- › Publicly available governance policy
- › >95% employees have a permanent contract
- › Regular board meetings
- › Independent board member

Long-term orientation towards the SDGs



The MVP portfolio's contribution to the SDGs



The MVP portfolio's contribution to the SDGs

2. Zero Hunger

According to the United Nations forecast, the world's population will increase to 8.1B by 2025. To master this the challenge, SDG 2 is amongst others aiming to double productivity and income of small-scale food producers.

Zero hunger is enhanced through MVP portfolio companies Prolupin and Novihum, which both aim to encourage sustainable agriculture and increase food security. Prolupin, for instance, is offering plant-based, lactose-free dairy substitutes from the blue sweet lupine, also known as the soy bean of the north. This domestic legume is particularly rich in proteins and undemanding with regard to soil and climate. Prolupin is thereby both maintaining the genetic diversity in food production as well as promoting resilient agricultural practices.



6. Clean Water and Sanitation

Water is essential for agricultural production and food security. Up to 70% of the water we take out from rivers and groundwater goes into irrigation. One of the targets pursued by SDG 6 is the improvement of water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials.

MVP portfolio company Novihum developed a uniquely scalable innovative soil conditioning technology that replaces natural humus in degraded and arid soils and significantly increases crop yields while reducing water usage and pollution. Furthermore, Novihum is free from pathogens, salts and pollutants and offers the perfect solution for improving the water uptake and storage capabilities of soil.



7. Affordable and Clean Energy

One in seven people still lacks electricity. Ensuring everyone has access to affordable and clean energy is an ongoing challenge for global development. Investing in non-fossil energy sources and improving energy productivity are vital if we want to achieve SDG7 by 2030 and increase global percentage of renewable energy.

sonnen (sold to Shell) aims for a world in which everyone is able to cover their energy needs with a distributed and clean energy source. The Company developed an intelligent storage system which in combination with a solar PV allows customers to cover about 75% of their energy need, contributing to a sustainable future.



The MVP portfolio's contribution to the SDGs

8. Decent Work and Economic Growth

SDG 8 is promoting higher levels of economic productivity through technological upgrading, diversification, and innovation. Furthermore, it encourages entrepreneurship and the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

Startups accelerate economic growth faster than the rest of the economy. According to the European Policy Centre, 50% of the new jobs are actually created by startups. In 2019, our remaining portfolio companies accounted for 435 of these jobs created by startups. We, at MVP, are convinced that innovative technologies, promising ideas and exceptional entrepreneurs are the key to the future of our society.

9. Industry, Innovation, and Infrastructure

Some of the sub-targets promoted by SDG 9 are retrofitted industries, increased resource-use efficiency as well as greater adoption of clean and environmentally sound technologies.

Retrofitting delivers the ability to implement new solution using existing equipment, allowing organizations to keep pace with consumer needs without the associated investment. Our already exited portfolio company relayr (sold to Hartford Steam Boiler, a subsidiary of Munich Re) instruments buildings and machines to measure and report on different factors such as: temperature, light, movement, and noise. From water management to transportation, with relayr's solution efficiencies can be gained in many areas: waste and power costs reduction, increased energy efficiency, or lower emissions.

11. Sustainable Cities and Communities

Today, 55% of the world's population lives in urban areas. By 2050 this number is expected to increase to 68%. As these population-dense cities will have a huge demand for power supply, incorporating smart energy concepts is not an option anymore, but a necessity.

While the proportion of energy from renewable sources is on the rise, energy retailers are still lacking behind in finding solutions for integrating and balancing these sources. One possible solution is offered by GreenCom. GreenCom's highly scalable Energy Information Brokerage Platform connects distributed energy devices, e.g. solar PVs or heat pumps, manages the data, and connects devices and customers.



The MVP portfolio's contribution to the SDGs

12. Responsible Consumption and Production

With 1.6B smartphones sold in 2018, one might wonder what happens to used phones which to a large extent are still in a useable condition. Unfortunately, estimates show that 75% are left sitting in the drawers, even though consumers could earn money by reselling those devices to e.g. refurbishers.

Choosing refurbished electronic devices over new ones extends the lifecycle of these devices and also reduces waste. Furthermore, as demand for new devices decreases, earth's raw materials are preserved. MVP portfolio company AGAN is following the same mission. The Company purchases used devices, refurbishes them, and resells the devices up to 30% cheaper compared to new ones.



13. Climate Action

The effects of climate change are already visible and it is time to take action. According to its low-carbon economy plan, the EU should by 2050 cut greenhouse gas emissions by 80% below its 1990-levels.

As a cleantech VC, all of our companies have a positive effect on the environment. For instance, Electrochaea, developed a disruptive grid scale energy storage technology known as Power-to-Gas. The process converts low-cost and stranded electricity into pipeline-grade renewable gas for direct injection into the existing gas grid. As carbon dioxide is used as a feedstock in the process, Electrochaea's renewable gas can reduce greenhouse gas emissions by up to 50%.



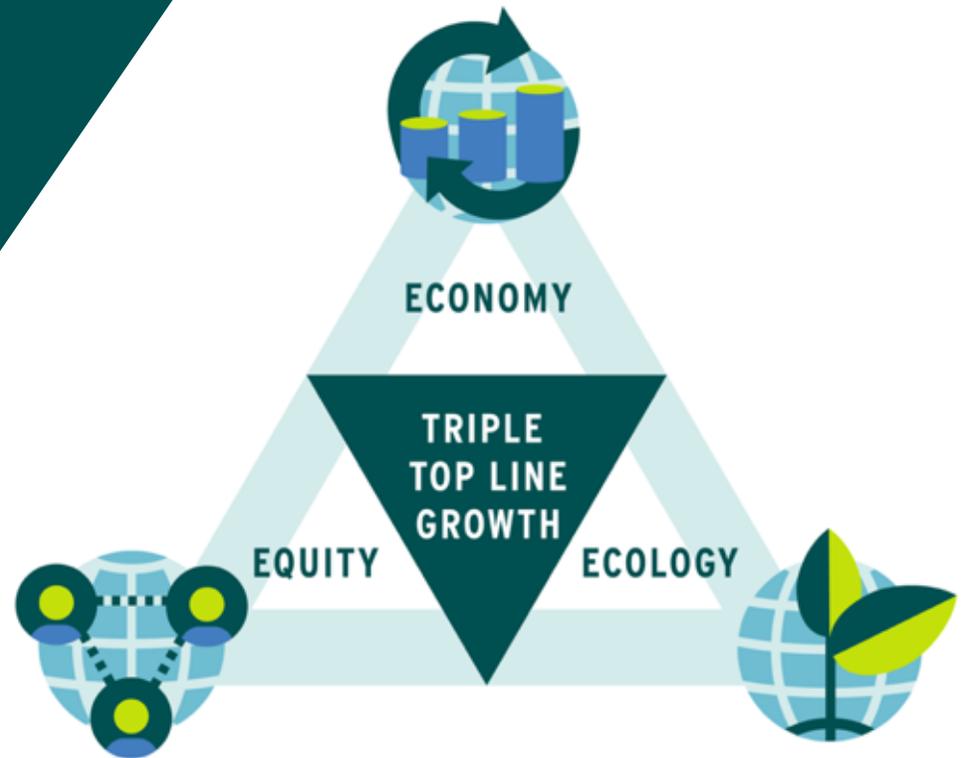
15. Life on Land

SDG 15 aims to mobilize significant resources from all sources and at all levels, to finance sustainable forest management and provide adequate incentives to developing countries as well as to advance such management, including for conservation and reforestation.

MVP portfolio company Kebony produces an enhanced wood of a superior quality that is environmentally friendly and provides an affordable and sustainable alternative to tropical hardwoods and conventionally impregnated timber. Kebony's sustainably-sourced wood is impregnated with a liquid mixture from agricultural waste, resulting in improved durability and dimensional stability, without the need for environmentally-damaging treatments.



Implementing the Triple Top Line approach



Development towards the Triple Top Line

2013

2018

2020



ESG Reporting

Tracking the ESG performance of our portfolio through company specific KPIs.



Doing things right.



SDG Reporting

Linking investees and ESG KPIs to the SDGs.



Doing the right things.



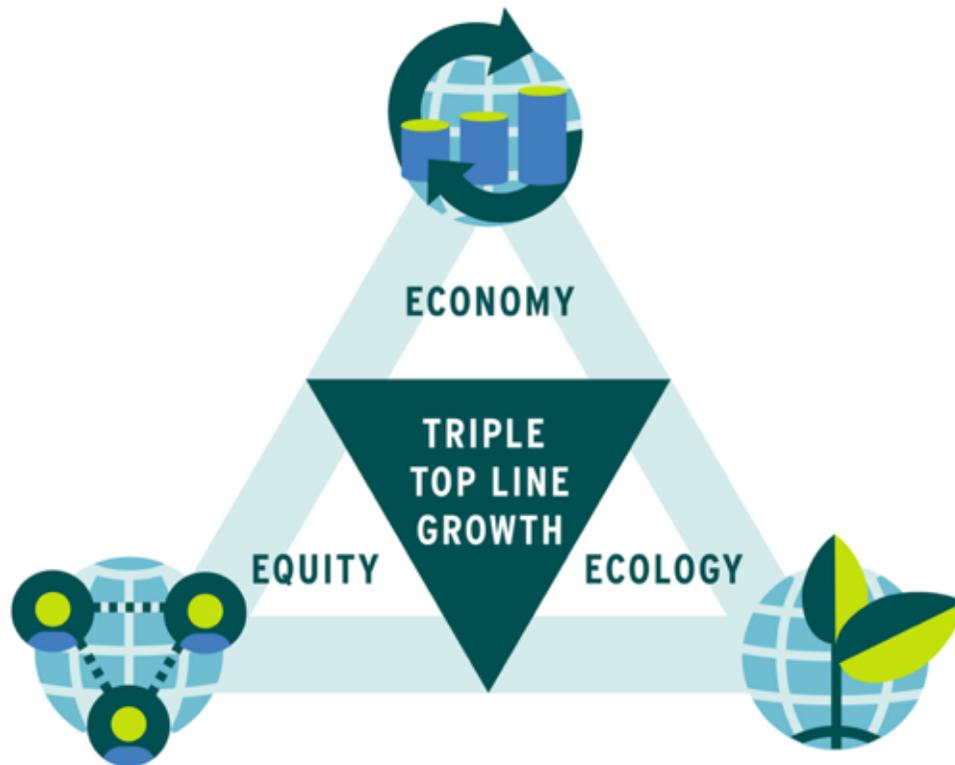
Triple Top Line

Contributing to the SDGs through value creation on all pillars of the Triple Top Line.



Doing the right things right.

Our investment strategy delivers value along the three pillars of the Triple Top Line



The Triple Top Line, adapted from: [Design for the Triple Top Line: New Tools for Sustainable Commerce](#), W. McDonough and M. Braungart

The Triple Top Line aims for a sustainable industrial system, generating economic returns while enhancing nature and society. Rather than reducing negative effects by balancing economic, ecological, and social equity targets, the Triple Top Line chooses to employ their dynamic interplay to concurrently generate value on all three pillars. By concurrently maximizing value, the Triple Top Line points out that economic growth, environmental gains and societal value creation are not only interconnected but mutually reinforcing each other.

Two of the guiding principles of the Triple Top Line are:

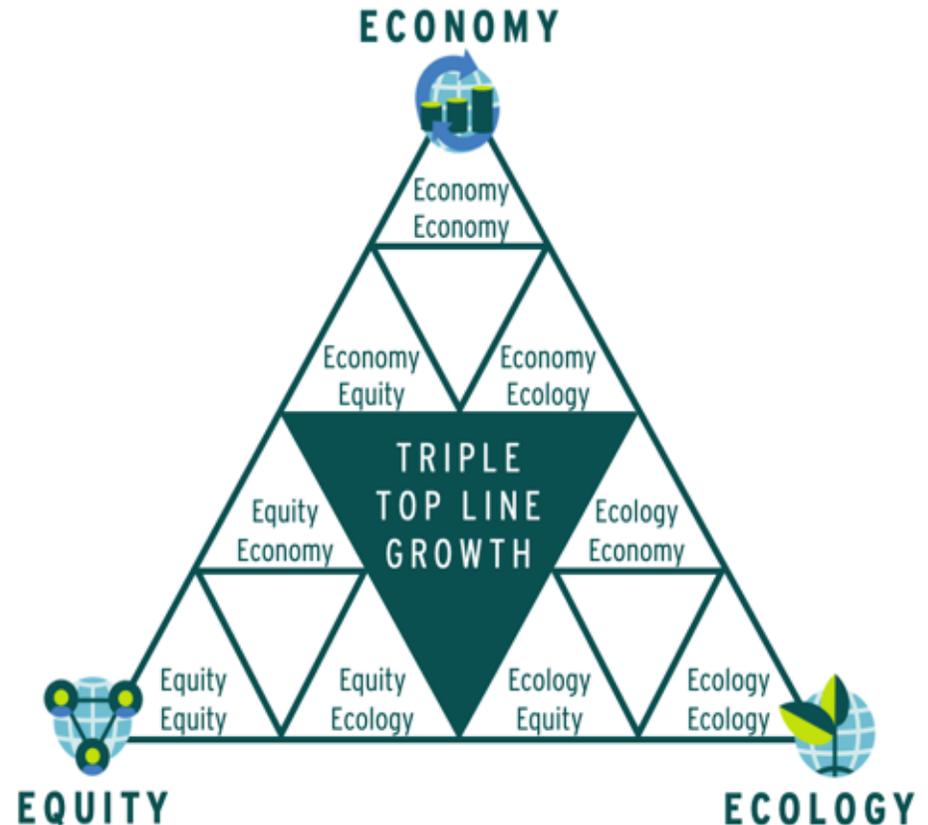
- › Don't just minimize negatives, also maximize positives; which implies shifting the focus from negative value judgements to questions of quality and enhancement.
- › Be efficient and effective; efficiency means doing things the right way, effectiveness is doing the right things. Only by employing both, real progress will occur.

Our investment strategy delivers value along the three pillars of the Triple Top Line

The Triple Top Line is embodied in the fractal triangle. When using this tool, the starting point is the top corner of Economy - Economy¹ as the first aspect to be considered is whether a product can be made at a profit or not. If that is not the case, the process ends here due to lacking economic viability. Otherwise, one can start moving around the fractals and examine how progress can be generated in each.

In W. McDonough and M. Braungart's model this is attained through questions such as: Will our production process use resources efficiently? Are we finding new ways to honor everyone involved, regardless of race, gender, nationality or religion?

Our first step in implementing the Triple Top Line into the Venture Capital world meant translating the SDGs into investible opportunities and linking them to the fractals of the Triple Top Line.



The Triple Top Line, adapted from: Design for the Triple Top Line: New Tools for Sustainable Commerce, W. McDonough and M. Braungart

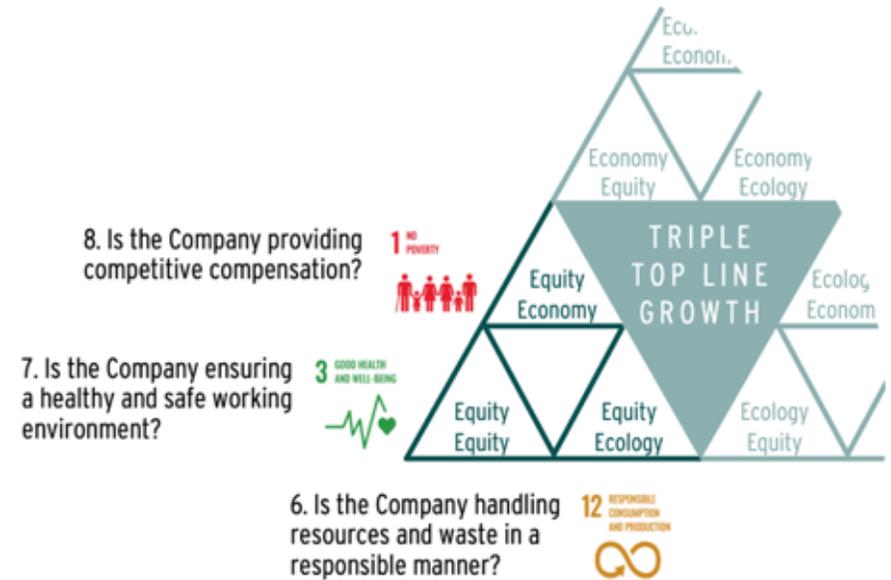
¹ In the original model Economy-Economy is in the bottom right corner

Our investment strategy delivers value along the three pillars of the Triple Top Line

Inspired by the original model, we then elaborated our own set of questions for each fractal. We thereby took into account the value creation opportunity in the respective fractal as well as the sub-targets of the assigned SDG(s).

By condensing it down to 9 simple questions - one for each fractal - and deriving tangible measures and KPIs out of these, we found a straightforward way of implementing the Triple Top Line on a portfolio company level.

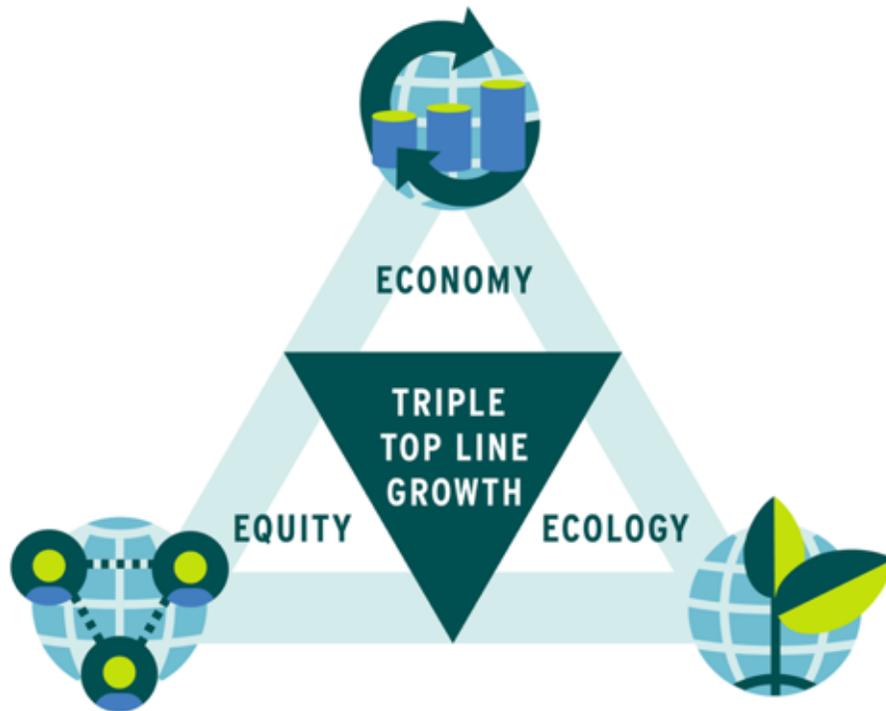
We use the Triple Top Line both pre-investment, to evaluate startups as part of our Due Diligence processes, as well as during the active holding period, as a very effective controlling and guidance tool. On a yearly basis we evaluate the progress achieved by our investees in each fractal, analyze where there is still room for improvement, and set new targets. Additionally, an underlying scoring system enables us to track and compare the progress of our portfolio companies.



An extract from the possible assignment of the SDGs to the fractals and attributed questions

- Possible post-analysis action items derived from above:**
- 6. Development of measures eliminating hazardous by-products
 - 7. Increased spendings on maintenance & safety of production sites accompanied by the definition of high leverage measures
 - 8. Implementation of an employee stock option plan

What we particularly like about the Triple Top Line



Employs the dynamic interplay of economic, ecological, and social equity targets rather than balancing these goals



Points out that economic growth, environmental gains and societal value creation are not only interconnected but mutually reinforcing each other



Holistic approach: concurrently maximizing value on all pillars

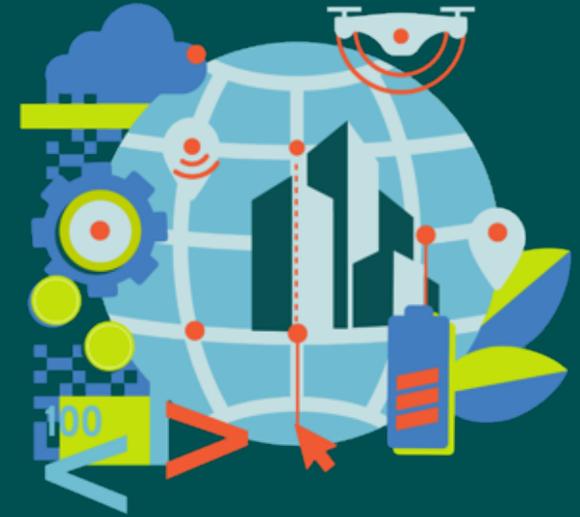


Efficiency and effectiveness: doing the right things the right way



Condensing it down to nine questions and deriving high leverage measures, enables an easy implementation on a portfolio company level

Driving the eco-industrial revolution



We drive the eco-industrial revolution with venture capital by promoting visionary startups that transform entire value chains. The innovative energy of these startups enables us to exploit significant return potential for investors, whilst simultaneously promoting environment and society.

Rumfordstraße 34
80469 Munich
+49-89-2000123-0
info@munichvp.com

mvp