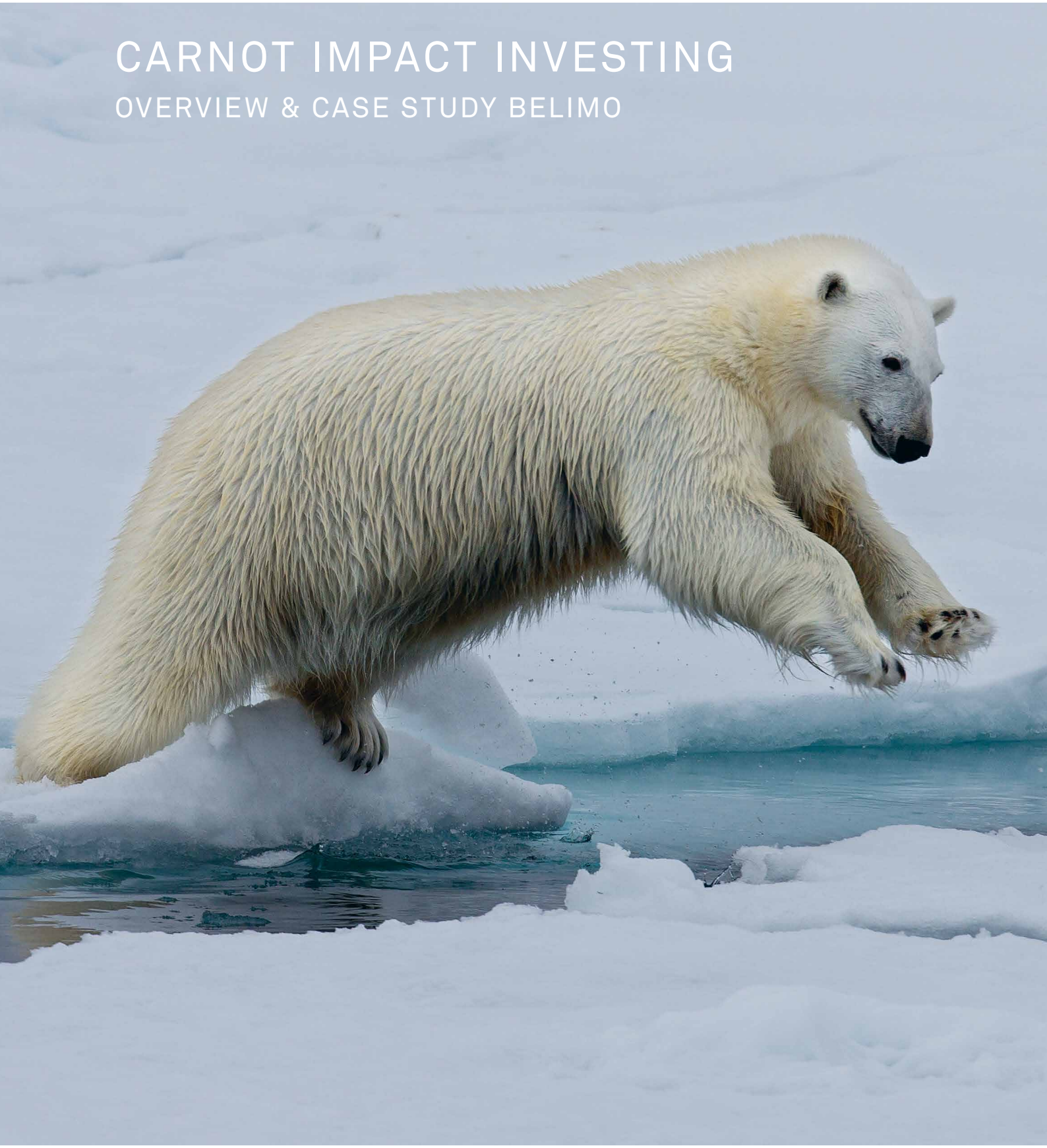
CARNOT CAPITAL

CARNOT IMPACT INVESTING

OVERVIEW & CASE STUDY BELIMO



In cooperation with:

BlueOrchard Impact Investment Managers

BELIMO

PRI Principles for Responsible Investment

IMPACT INVESTING IN NUMBERS

50%

of the turnover of the portfolio companies promotes the defined SDGs

0%

of the portfolio companies are active in controversial activities

5.5 %

of the portfolio companies' sales are invested in research and development of Impact products

FIVE SDGS ARE IN THE FOCUS OF THE CARNOT EFFICIENT ENERGY FUND

IMPACT. BEYOND ESG

The integration of impact aspects into the investment process is becoming increasingly important. This reflects the consideration of social, entrepreneurial and environmental factors, which is taking place on a broad front in society. This development is increasingly spilling over to the political level as well – "Green is the trend colour of the political fashion season"[1], the population of the European continent seems to be changing direction.

Carnot Impact Investing since 2007

- integrates ESG sustainability as a bottom-up process into impact analysis
- sees the fight against climate change as a business model with attractive opportunities
- does not demand a renunciation of consumption
- initiates active engagement in personal dialogue with the companies
- finds the innovative and promising companies

In 2007 Carnot Capital set this course when it was founded. By focusing on the topics of energy and resource efficiency, sustainable investment is deeply embedded in the investment strategy. Last year, we were able to present the concept of how Impact is specifically integrated into the investment process to the general public in the form of a research paper[2]. The positive feedback encouraged us to publish further articles about Impact Investing.

This case study focuses on an application of this research paper. The focus is on the tangible effects triggered by the Carnot investment process: Which areas are affected by the funds? Where do the portfolio companies achieve tangible improvements and reduce energy and resource consumption? The case study in Chapter 3 is intended to help give the inflationary terms 'impact' and 'sustainability' a concrete face. Belimo shows how a manufacturer of energy-efficient products passes the financial, ESG and impact analysis test as an example.

A note on the discussion about impact and sustainability, which in many places runs in a quasi-religious direction. The moralizing attitude that prevails in public discussion too often leads to dirigiste measures and regulations. We are of the opinion that regulatory measures should relate to the objectives and framework conditions in advance. The ***economic potential of the capital market,*** with its enormous financing capacity, offers great opportunities to tackle the challenges surrounding the protection of our living environment. Innovative strength plays a key role in this process. In the long run the use of this creative power brings both the company and the investor the maximum yield – also financially!

Carnot Impact Investing is not swimming on a green wave but wants to actively shape the future and take responsibility for the next generation with the current generation.

Rolf Helbling

Andres Gujan

1 NZZ Neue Zürcher Zeitung, Experten für den Weltuntergang, Nr. 97, Saturday 27.4.2019, Page 1.

2 See Investments into Energy and Resource Efficiency with a Measurable Impact, https://www.carnotcapital.com/en/impact-investing-en/

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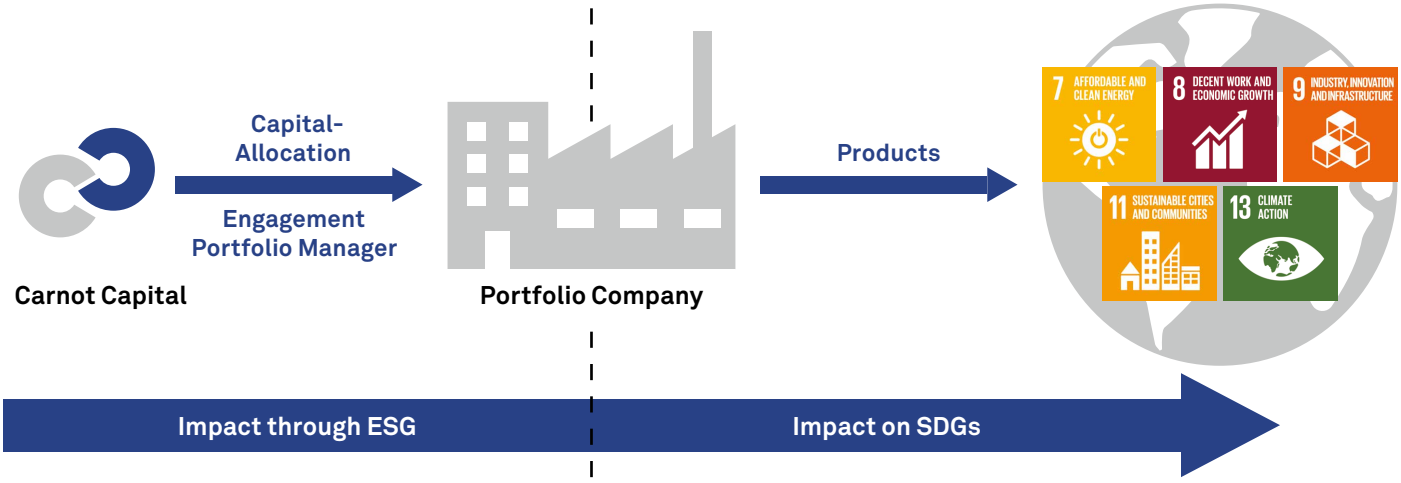
1. OVERVIEW CARNOT IMPACT INVESTING

The growing consumption of resources influences the climate and endangers our habitat. Reducing consumption by improving resource and energy efficiency is the ideal solution for Carnot Capital for two reasons: Firstly, unconsumed resources bring maximum benefits from an ecological perspective. Secondly, over the past twelve years, we have repeatedly seen that investments in reducing consumption also pay off at the financial level.

Impact beyond ESG



Carnot Impact Investing comprises a targeted allocation of capital to companies with positive effects as well as a commitment by the portfolio manager. Source: Carnot Capital

1.1 Less Consumption through Better Efficiency

Carnot Impact Investing focuses on ***reducing the consumption of natural resources.*** The focus is on products, technologies and services that conserve natural resources or use them more efficiently as production factors. We assign the concrete fields of application to the basic elements fire (energy), water, earth and air.

> ***"We invest in innovative companies with resource-conserving technologies. We regard the financial return as a prerequisite for sustained positive impact. To determine the impact, we do not use databases, but expertise and detailed work."***

In-depth financial analysis evaluates the return potential of an investment and ensures that ***financial returns are a priority.*** As a supervised "Independent asset manager of collective investment schemes" and specialist in equities, Carnot relies on an ***active strategy.*** The portfolio managers combine the value approach based on financial ratios with the impact and sustainability analyses to form the ***"blend approach"***. In this way, financial added value is created in various ways:

a) Growing demand: companies that use their ***innovation*** and ***knowledge*** to help preserve the climate or solve other environmental problems benefit from growing demand.

b) Risk reduction: The lower consumption of energy and resources reduces the negative external effects and thus the risks.

1.2 Impact

We check and document the impact of each portfolio company based on a comprehensive check grid. ***(Impact Questionnaire, Part 1)***. We examine, among other things, whether the reduction of resource consumption is part of the strategy, what R&D expenditure the company incurs, which products contribute to the conservation of resources, what benefits they bring ecologically and financially. We check and record which sustainable development goals are strongly influenced and to what extent and present the results in aggregated form as a heat map. (SDG mapping[3]). This in-house, comprehensive evaluation provides the basis for impact reporting with the ***SDG Impact Ranking List*** and the ***Impact Heatmap.*** Details about the implementation and evaluation can be found in chapter 4 of this study.

1.3 Integral Sustainability: More than ESG

The sustainability analysis is not only prepared through negative screening (exclusion lists, ***top-down***), but also through positive screening (ESG rating, ***bottom-up***), which increases the quality of the analysis many times over. Since commercial databases only provide parts of the ESG data set, we contact the companies directly and collect the missing information with our ***ESG questionnaire. (Part 2)***.

1.4 Engagement

If the Carnot analysis reveals questions (e.g. regarding corporate governance) or suggestions for improvement (e.g. reporting on the impact of the company), we make use of our contacts at management level and address these ***engagement issues*** personally. Our ***Engagement Questionnaire*** (Part 3) shows this step in the process.

1.5 Innovation

While abandoning consumption is the easiest and most effective way to reduce resource consumption, it is also an illusion. Rather, the aim is to reduce the consumption of resources without a loss of prosperity through clever innovation. The ability of companies to innovate therefore plays a central role in our strategy.

3 United Nations (2015), Sustainable Development Knowledge Platform, SDGs.

Innovation does not mean basic research or 'rocket science', but the development of application- and customer-oriented solutions to reduce consumption. Technological progress enables optimized use of energy and resources at economically low costs.

"Innovation is a core element in our impact analysis of companies."

1.5.1 How does Carnot find the technology leaders?

In the Carnot Impact investment process, the first step is to search the relevant industries for companies with efficient products and then subject them to an initial financial analysis. Return on capital employed (ROCE) has proven to be a good indicator of technology leadership and marketability. Our good network in the industry helps clarify specific issues directly with the companies.

The following examples will illustrate how clear improvements can be achieved with a manageable amount of resources:

1.5.2 How can processes be improved?

- Automation: Robot technology enables flexible, highly accurate manufacturing processes with less waste and infrastructure requirements thanks to maximum capacity utilization (up to 24 hours). The use of resources is lower, and the production process must be ramped up and down less frequently.

- Digitalisation (IoT): Internet-of-Things technologies allow lower process costs through less manual intervention, less communication effort, shorter set-up times and easier information retrieval. Energy-consuming process steps are reduced to the required output. Additional digitised information improves product quality (compliance), transparency for process optimisation and service provision, enables proof of origin and provides the basis for the development of new products.

Innovation Instead of Renunciation: Smart City Example – innovation and connectivity reduce energy consumption and improve the quality of life. Clean, quiet, congestion-free.

VW MEB – A result of CO_2 limits: The CO_2 emission limits of 2008 (95g/km fleet average by 2020) have provided planning security and innovation.

- **Planning:** In the planning phase, the parameters of buildings, products or projects are set on the drawing board for a longer period. In the case of buildings, for example, a large part of the future consumption of resources is already determined at the design stage.

1.5.3 What is an innovation-friendly governmental regulatory framework?

State rules can promote entrepreneurial innovation and planning if they are designed to be market-oriented and reliable.

- **Guidelines:** Government regulations play an important role in the development of new products, services and projects, as they influence the market and change costs and benefits. Innovation must pay off for the company within a defined period.
- **Levies:** CO_2 tax and emissions trading mean an internalisation of external effects and are accepted by companies if they are implemented across industries. As technology-open measures, they provide incentives for innovation and improve planning security.
- **Accountability:** The state is held responsible and sued by its (young) citizens for non-compliance with environmental laws. In Canada, the Netherlands and other countries, corresponding court proceedings have been successfully concluded.

"The ever-increasing climate targets mean great opportunities for innovative companies in the Carnot portfolio."

2. IMPACT AREAS

Since 2007, the Carnot investment process has been based on ***reducing the consumption of energy and resources*** (energy and resource efficiency). Our sustainability approach therefore goes beyond the selection of companies based on their sustainability profile (ESG bottom-up approach). We ***actively*** select those companies that additionally use their ***innovative strength*** and knowledge to provide products, technologies or services that reduce consumption.

"Efficiency is defined as the effectiveness and profitability of a company. Technology leadership meets profitability!"

Efficiency generates positive effects (= impact), through our ESG filter we also make sure that the negative effects from production are minimized!

2.1 Climate Protection

The greenhouse effect is used as a decisive explanation for climate change in the industrial age due to the increasing concentration of greenhouse gases, which cause a decreasing permeability of the long-wave infrared radiation reflected from the earth's surface in the atmosphere.

> ***"Global warming is a major threat. The Carnot companies have the technology to counter it."***

The most important greenhouse gases are water vapour (62%) followed by carbon dioxide (22%). The atmospheric concentration of carbon dioxide is expressed in ppm (= parts per million). Since the beginning of the industrial age, human influences have increased the carbon dioxide content from 280 ppm to over 400 ppm. This is the highest concentration for at least 800,000 years and changes the Earth's radiation and energy balance. This results in a temperature increase.

The magnitude of the energy and climate problem is directly linked to the ***growth of energy production.*** The growing demand for energy can be met through increased production or more efficient use of existing energy.

As a pragmatic approach for climate protection, the focus on the change of the CO_2 concentration in the atmosphere is logically comprehensible. Reducing CO_2 emissions is a viable way to counteract global warming by reducing the burning of fossil fuels. Carnot Impact Investing aims to demonstrate this reduction in consumption by focusing on the sub-themes of ***building technology, transport and industry:***[4]

Without investments in innovative technologies global warming is a serious threat to livelihoods.

4 https://www.energiestiftung.ch/energieeffizienz-gebaeude.html

Starting Point to Emission Reduction in Switzerland

BUILDING TECHNOLOGY
The Swiss building park accounts for around 50% of energy consumption and 30% of CO_2 emissions.

TRANSPORT
Transport accounts for 36% of final energy consumption, 94% of which is covered by petroleum products.

INDUSTRIALS
The greatest potential lies in electric motors in industry and commerce, where almost 6 billion kWh are wasted.

Source: Swiss Federal Office of Energy, Carnot Capital

2.1.1 Better Building Quality

Almost three quarters of the ***2.3 million buildings*** in Switzerland consist of residential buildings and one quarter of service and public buildings.

> ***"Thermal insulation in old buildings: low hanging fruits in energy efficiency."***

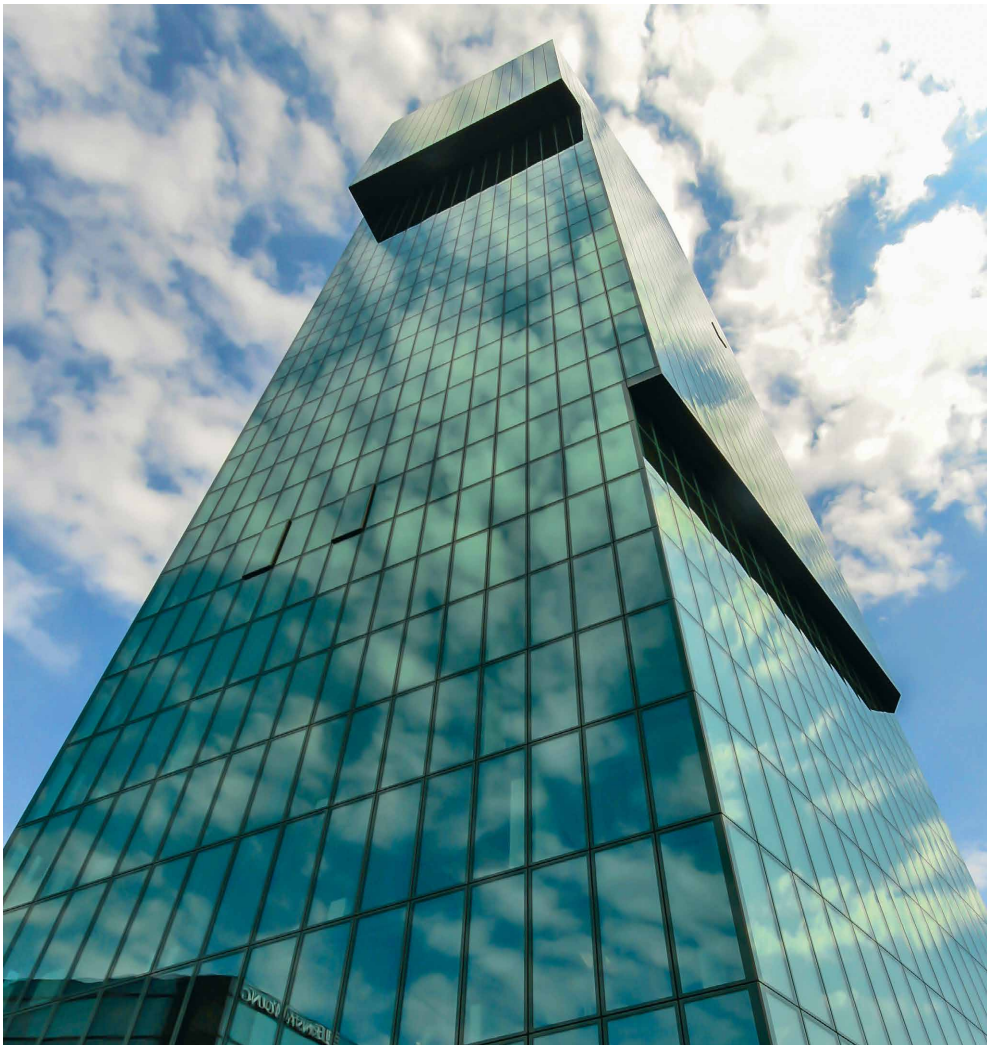
This building park accounts for around 50% of Switzerland's energy consumption. Construction processes and building materials account for 10% and operation for 40% (heating, hot water, ventilation, air conditioning, appliances, lighting, etc.). Today, most of the heat produced for buildings is produced by oil and gas boilers. The building sector is responsible for around 40% of Swiss CO_2 emissions.

First commandment: *A dense shell. The greatest energy losses are caused by the leaking shell of old buildings.*

a) **Building Shell:** Most of the energy is needed to regulate the room temperature. The less heat escapes or penetrates the building, the less energy must be used for heating or cooling.
Around 50% of the losses penetrate through the walls, roof and floor. Good ***thermal insulation*** is therefore the most effective measure.
Windows account for about 30% of a house's heat losses. In the south, large-area windows should be used, as ***new windows with 3 layers of glass have a positive energy balance*** (the energy of solar radiation outweighs the heat losses).
A further 20% of the heat is lost due to the air change. Comfort ventilation systems extract the heat from the used air and lead it back into the house with the new air. This provides constant fresh air with low heat loss.

b) **Building Management (Controlling the Technology):** Building technology comprises all technical disciplines in the building. These include heating, hot water, ventilation, air conditioning, refrigeration, sanitation, electrical and building automation. The latter electronically monitors and controls the consumption of electricity, heat and hot water. To reduce consumption, ***precise measurement of the room climate,*** minimum power consumption of the drives for all applications, prevention of circulation losses, intelligent use of drive and sensor technology, simplified installations, commissioning and reduced maintenance are required.

c) **Planning:** In general, planning offers the ***opportunity*** to create the conditions for ***low energy consumption*** and simple ***building services installations.*** This can be achieved by implementing a Minergie standard.



Exemplary Buildings Modern control of ventilation, cooling, heating and lighting enable one to cut the power consumption by more than half.

stadlerrail.com

Electric, also without overhead contact line: *Energy efficient and clean. Batteries and fuel cells can bridge non-electrified distances.*

2.1.2 Reduced Emissions in the Transport Sector

Vehicles used to transport people and goods today almost exclusively use fossil fuels as energy sources. The CO_2 pollution of traffic is correspondingly high. A reduction in emissions can be achieved by a) ***reducing consumption*** of conventional technologies, b) ***shifting to lower-emission*** modes of transport (rail, water), c) ***alternative propulsion systems or fuels.***

a) Consumption Reduction: The energy efficiency of conventional combustion engines can still be significantly improved. This applies to passenger cars and trucks as well as to other commercial vehicles such as construction machinery, tractors, diesel locomotives, ships and aircraft. The focus is on reducing vehicle weight and increasing the efficiency of engines and turbines.

b) Shifting to Rail and Water Transport: Rail transport offers an energy-efficient alternative to road transport. With the expansion plans for connections from Asia to Europe, rail transport is also becoming an alternative to air freight. The energy-efficient alternative to air freight in intercontinental traffic is by sea.

c) Alternative Drives and Fuels: The switch from heavy oil to natural gas drastically reduces emissions from shipping. Emissions from road vehicles can be largely eliminated by using biofuels such as ethanol, biodiesel or synthetic methane. This also applies to the electrification of vehicles if the electricity used is produced CO_2-free. The electric motor can be powered directly from the mains, a battery or a fuel cell.

2.1.3 Energy Efficient Industries

Electric motors can reach an efficiency of 60–90%, internal combustion engines 20–40%, but the remainder is converted into heat and is lost to the atmosphere. Usage and deployment controls are therefore of central importance for efficiency.

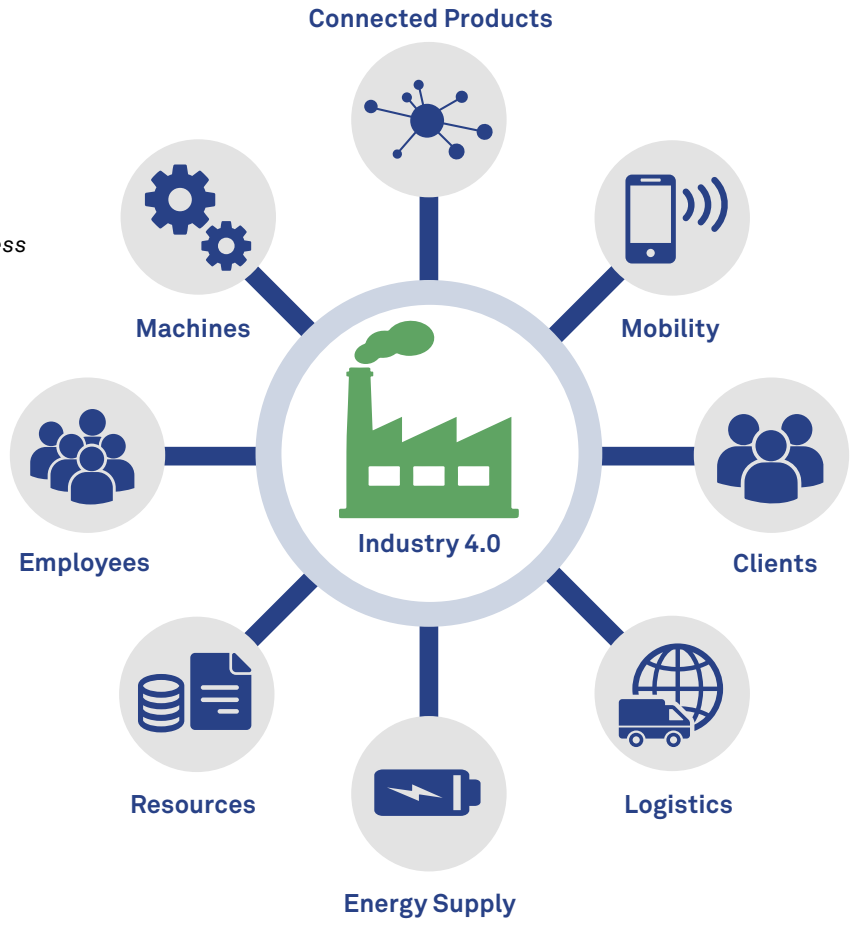
a) Process Technology: Energy consumption in industrial processes is first reduced by using more ***energy-efficient components such as motors, power electronics,*** heat exchangers, pumps, etc. The first step is to reduce energy consumption in industrial processes. Equally effective are the coordination of the components with each other and the control of the overall system. The waste heat from cooling units is used for heating processes, the performance of pumps is reduced to the effectively required level. ***Automation and digitization, including sensors and communication technology*** (Internet of Things) are key technologies for improving energy efficiency in industry.

b) Energy Production: Technologies for ***energy production at low-CO_2 intensity*** we assign to the Industry segment.
These include ***renewable energy*** suppliers like hydropower, wind energy, solar energy, biogenic fuels (wood, biogas), geothermal energy, hydrogen, syngas (methane) and ***recycled energy*** recovered from waste in combined heat and power (CHP) plants. Nuclear energy is also considered a low-CO_2 energy supplier, but the safety and disposal problems reduce its acceptance in society.

"Industry 4.0: It's not about expanding capacity, it's about intelligent modernization."

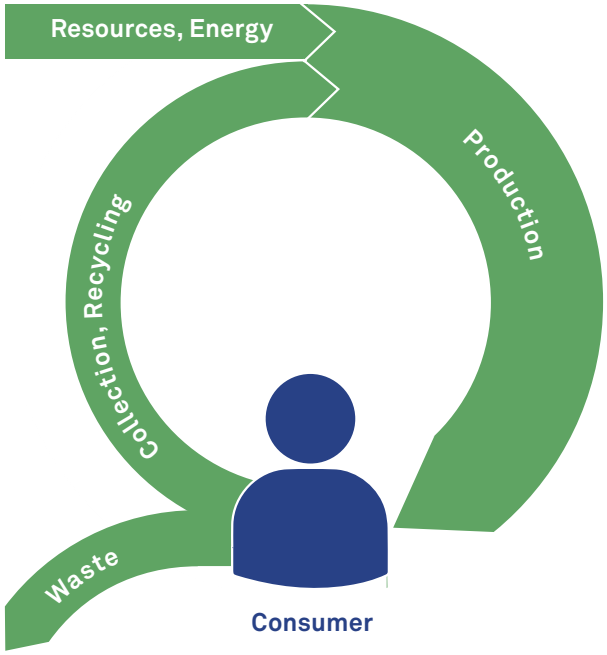
Industry 4.0

Sensor, communication and computer technology enable high efficiency gains in process technology.



Source www.serkem.de/industrie-4-0-produktion-vorteile-mehrwert/

The Path of Natural Resources



www.serkem.de/industrie-4-0-produktion-vorteile-mehrwert/

"Investments in recycling are a huge opportunity to curb resource consumption."

The supply chain is well developed all the way to the consumer, from where the infrastructure for a recycling economy is still largely lacking. Source: Carnot Capital

c) Energy Supply: ***Supply and storage technologies*** are an integral part of a low CO_2 energy supply. These include electricity transit and distribution technology including intelligent grid management (***smart grid)***, intelligent meters ***(smart metering)***, battery and charging technology.

2.2 Closed Loop Economy

The circular economy is the future of our children and grandchildren! The opportunities for many companies in the Carnot universe are correspondingly great. The "disposable economy" relies on large quantities of cheap, easily accessible materials and energy. In contrast to this stands the "circular economy" in which raw materials and products are divided, leased, reused, repaired, refurbished and recycled for as long as possible. The ***life cycle of materials is extended, and waste is reduced to a minimum.***

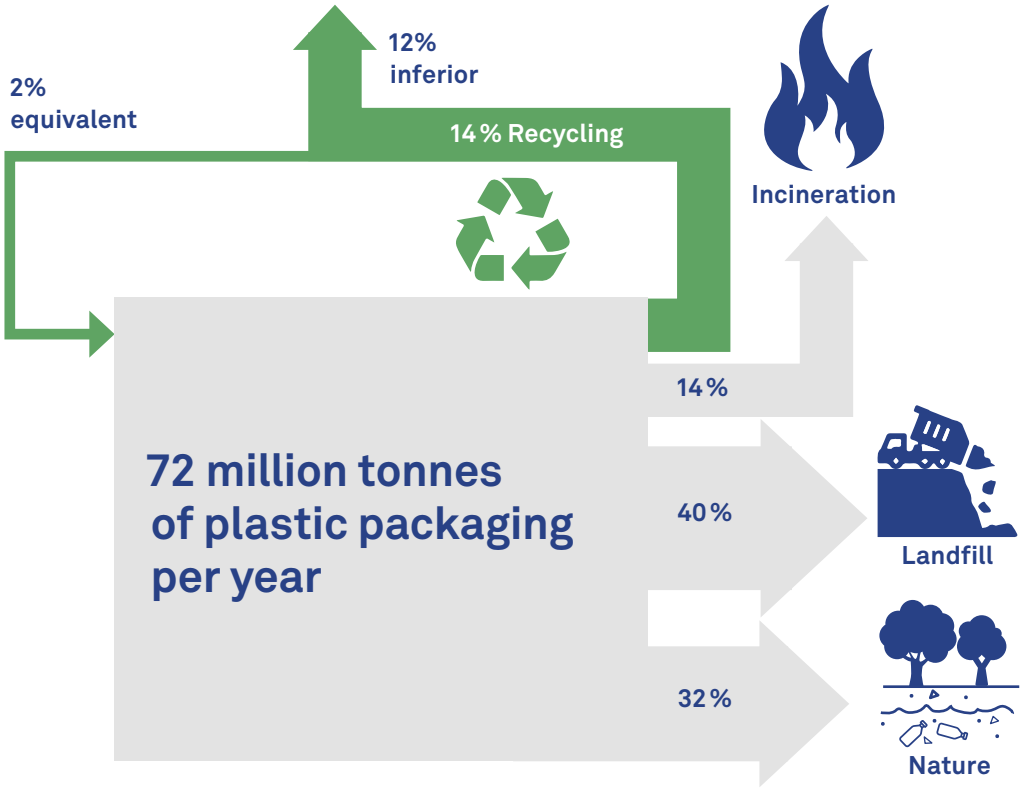
The European Parliament estimated in 2015 that by reducing consumption (waste prevention, eco-design, reuse and similar measures) net annual savings of 600 billion euros or 8 percent of the annual turnover of companies in the EU could be achieved, while at the same time reducing greenhouse gas emissions by 2 to 4 percent.

2.2.1 Installation of Systems

a) Standardization of Substances: For hygienic reasons and water protection, waste disposal was monopolised to the state throughout Switzerland in the 1960s and the waste was sent to landfills unsorted. With the introduction of the refuse bag fee, an economic incentive to avoid waste was introduced. Accompanying this, collection points for recyclable materials were set up. A standardised labelling system from Swiss Recycling[5] defines the collectable resources.

5 see http://www.swissrecycling.ch/dienstleistungen/ piktogramme/#c15661

Heading away from plastic packaging



The need for action and the potential for innovative solution providers are immense.

b) Integration of the Consumer Goods Industry: The commitment of the consumer goods industry is based on the "polluter pays principle" thereby internalising external costs. The purpose of the approach is to extend a producer's responsibility over the actual use of his product. Producers are responsible for both upstream production and downstream recycling. The main objective is to achieve optimisation through increased self-responsibility, for example in product design, through labelling with official recyclables pictograms as a collection aid or through take-back obligations (industry standards by self-regulating organisations (SROs), disposal fees as part of the selling price, deposits).

2.2.2 Operation of Systems

a) Collect and Recycle Plastics: Despite all political efforts and regulations, the volume of plastic waste worldwide will increase by up to 80% to 440 million tonnes by 2030. But there is also good news: the recycling rate could simultaneously increase from currently 14% to up to 50%.[6]

b) Plastic Packaging Cycle[7]: Currently, 70% of plastic packaging is lost through landfill or discarding in nature, a further 14% is incinerated. Only 14% is recycled and only a small part (2%) of this is returned to the cycle as an equivalent raw material.
The collection potential is very large and produces an equally large reduction in environmental pollution. The refinement of recycled packaging into equivalent raw materials is only just the beginning.

6 https://www.mckinsey.de/news/presse/2018-12-19-plastikmuell

7 Source: Ellen MacArthur Foundation

TOMRA
COLLECTION SOLUTIONS

"OUR SOLUTIONS ARE IN USE AROUND THE WORLD AND IN 2017 HELPED

- **avoid the release of 25 million tons of CO_2 emissions**
- **return 35 billion used beverage bottles**
- **collect and sort 715,000 tons of metal."**

Dr. Volker Rehrmann, *CTO, Head of Tomra Sorting Solutions, at the Carnot-panel discussion*

c) **Example:** Tomra: Tomra Systems ASA is a Norwegian manufacturer of recycling technology listed on the Oslo Stock Exchange. The company operates the Collection Systems and Sorting Solutions business units. The ***Collection Systems*** division bundles the business areas of reverse vending, compaction and waste recycling. The business segments Recycling, Food, Mining and Special Solutions are combined in the business segment *Sorting Solutions.*

"With efficiency you achieve Impact!"

2.3 Addressed Development Goals (SDGs)

In our *Carnot Impact Mapping,* the reduction in consumption from the three Carnot areas, including sub-themes, is compared with the content objectives of the SDGs and linked if there is a qualitative agreement. With the *Carnot Impact Analysis questionnaire,* the impact of the selected companies is assessed according to specified criteria and recorded with *a personal evaluation and scoring method (0–3).* A *Carnot Impact Ranking List* and *Impact-Heatmap* reveal their quality and their contribution to the positive effects.

2.3.1 Achieved Development Goals

In the impact analysis, we examine the impact of the portfolio company and its products on the sustainable development goals, which are in the foreground due to the fund theme. The following overview shows the 5 SDGs with their respective sub goals, which are directly addressed by the energy efficiency fund Carnot Efficient Energy. Climate protection and clean energy (SDG 13 and 7) are at the forefront. There is also a direct impact in favour of innovation, sustainable cities and economic growth.

Addressed Development Goals (SDGs), Ranked According to the Impact of the Carnot Efficient Energy Fund *

Climate Action

13.2 Include climate change measures in national policies, strategies and plans

Affordable and Clean Energy

7.2 Significantly increase the share of renewable energies in the energy mix.

7.3 By 2030, to double the worldwide rate of in-crease in energy efficiency

Industry, Innovation and Infrastructure

9.4 Modernize infrastructure, increase the use of clean and environmentally sound technologies and industrial processes.

Sustainable Cities and Communities

11.2 Enable access to safe, affordable, accessible and sustainable transport systems for all, through the development of public transport.

11.6 Reduce urban pollution, improve air quality, treat waste

Decent Work and Economic Growth

8.4 Move towards decoupling economic growth from environmental degradation

* Size of the symbols equal to the significance of the impact according to the heatmap

Source: Carnot Capital

3. CASE STUDY

Belimo Headquarters in the United States, Danbury CT: *Belimo is not only committed to environmental protection, but also attaches great importance to health, further training and social commitment.*

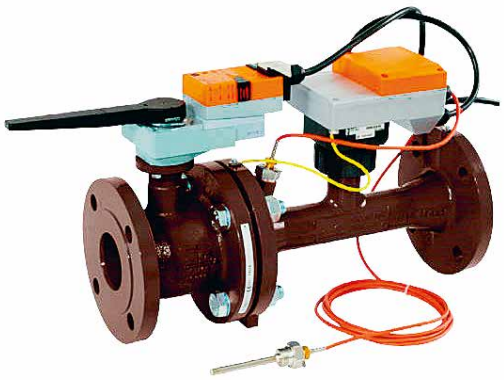
With a share of around 40% of global energy consumption, buildings are largely responsible for global CO_2 emissions. In addition to heating, cooling also consumes more and more energy.

Belimo plays a key role in the efforts to reduce the energy consumption of buildings. Belimo's products make it possible to significantly reduce energy consumption without compromising comfort, especially in commercial buildings. This case study intends to illustrate this.

3.1 Belimo: Global Market Leader Through Innovation

Belimo was founded in Gossau (ZH) in 1975. Already the first products were to become a world novelty: Belimo's drive for regulating the air supply in the building was mounted directly on the damper axis, which reduced the installation time by two thirds. The products became capable of communicating at an early stage. It is therefore not surprising that Belimo plays an important role in building automation and is instrumental in shaping the 'Internet of Things" in buildings. The following innovations, among others, are ground-breaking:

Energieventil Belimo Energy Valve™: Can maximize the performance of a cooling or heating appliance. It regulates the flow rate so that the temperature difference between flow and return is maximized. A ground-breaking innovation in building technology.



ZIP Economizer: Intelligent accessory for air conditioning systems. Optimally adjusts the air conditioning system according to the postcode (ZIP), which, among other things, enables a local maximum of "free cooling" (free cooling with cold night air).

CO_2-Sensor: The rooms are ventilated more strongly, less strongly or not at all depending on the existing CO_2 in the exhaust air. This allows the performance of the ventilation system to be enhanced and thus the energy consumption to be greatly reduced.

Innovations by Belimo that are paramount for reducing energy consumption and which have extremely short payback periods

3.2 Impact Analysis

Reducing energy consumption is explicitly part of Belimo's strategy. In order to implement this strategy, considerable investments have been made in research and development since the company was founded; currently these expenditures account for more than 7% of sales. The result of these efforts is that today an estimated 80% of products directly contribute to saving energy. Solutions that regulate the air supply depending on the room occupancy and temporarily switch it off completely typically save 50% in energy. There are examples where energy consumption could be reduced by 80% with Belimo products. Belimo is regarded as an innovation leader in the ventilation market and has received important awards. In America, for example, Belimo products qualify for buildings with the highest energy efficiency label (LEED Platinum).

Financial aspects are also decisive for a long-term positive effect. It is important that the products yield a positive financial return. The savings due to reduced consumption must typically amortize the additional costs of an energy-efficient product within 5 years for it to assert itself on the market – the payback period for Belimo products is often less than one year! This characteristic is an important reason ***for Belimo's above-average operating margin*** (17–18%) and the high return on capital employed (36%). Thanks to its high profitability and good cash flow, the company can maintain high growth and finance itself.

3.3 ESG Analysis

In a second step, we conduct an in-depth analysis of the E, S and G factors. With the help of a points system, we ensure that there are no unnecessary environmental risks in the portfolio. Belimo also scored excellently in this analysis and scored just under 90 out of 100 points. Belimo is a member of the UN Global Compact and is committed to environmental protection, responsible labour practices, human rights and the protection against corruption. A sustainability report has been published since 2011. We consider this to be meaningful, even if there are some gaps according to current standards, e.g. regarding accident rates, the promotion of women or the right of employees to have a say. But we also see Belimo as a role model regarding social aspects. Belimo, for example, invests a lot in the training of apprentices, in the integration of people with disabilities and is one of the most popular employers in Swiss industry.

3.4 Impact through Active Engagement

An active exchange with our portfolio companies is part of our investment philosophy. We are convinced that our appearance as owners and our commitment to sustainability create additional benefits. We use a systematic method ***(engagement questionnaire***, part 3) to find possible interaction points. We rely on our own sustainability analysis. We define shortcomings or discrepancies between our results and ratings from rating agencies as possible points of interaction. Our commitment enables companies to make targeted improvements.

Belimo is currently doing very poorly with rating agencies. We consider this to be inappropriate, because in our opinion Belimo not only develops extremely sustainable products, but also manages them very sustainably. We are therefore in contact with the management and have given suggestions as to where improvements may still be possible and how Belimo can improve transparency for sustainable investors.

3.5 Development Goals Achieved by Belimo (SDGs)

The Impact Analysis (Impact Questionnaire, Part 1) shows that energy-efficient products account for 80% of sales. These products are used worldwide. The R&D expenditure is very high with 7.7% of the turnover and the applications have a payback time between 2 and 60 months. The sustainable development goals 7 (affordable and clean energy) and 13 (climate action) are addressed significantly. We give a maximum score of 3, which means "significant". We rate the impact on SDG 9 (industry, innovation and infrastructure) as 2 "substantial" because Belimo's products help to cope with urbanization. We classify the impact on SDG 8 (decent work and economic growth) as "low" because the products – not least the fire dampers – improve well-being in the workplace and help to decouple economic growth and environmental destruction. For SDG 11 (sustainable cities and communities), we have opted for a rating of 0 "insignificant impact" because Belimo does not achieve any direct impact in the sense of the sub-goals listed here.

Belimo: Impact Appraisal by Carnot

Climate Action	3 Significant
Affordable and clean energy	3 Significant
Industry, Innovation and Infrastructure	2 Substantial
Sustainable cities and communities	0 Insignificant Impact
Decent work and economic growth	1 Low Impact

3.6 Small device big impact – a practical example

Asia offers great potential for Belimo for various reasons, one of which is the tropical climate with high temperatures and high humidity. In a research building at the Technical University of Singapore, for example, considerable savings were achieved with the help of the Belimo Energy Valves™ described above.

With the air conditioning system installed, the cooled water is distributed in the building as usual, where it flows back into the air conditioning unit after the room heat has been absorbed. It was noticeable that during intensive operation (strong cooling) the returning cooling water was not warm enough, i.e. had absorbed too little energy. The plant attempted to compensate for this by increasing the pumping capacity with correspondingly higher energy requirements. However, the higher flow rate increases the problem of the insufficient temperature difference between flow and return flow.

Belimo was able to offer a solution with the help of the energy valve. The intelligent energy valve, equipped with sensors, optimizes the flow rate so that the temperature difference between the outgoing and return cooling water increases and the cooling capacity maximizes. Today, the pump must circulate less water and therefore consumes less energy, with the same benefit.

Expressed in numbers this means: The maximum pumping capacity is more than 25% lower, the average pumping capacity and thus the energy consumption is more than 15% lower. Projected to the entire block, this corresponds to an annual saved pumping capacity of about 85 MWh. In addition, savings of another 200 MWh are achieved with the chiller. This corresponds to the electricity consumption of about 70 households! From a financial point of view, an investment of less than CHF 100,000 is offset by an annual cost reduction of around CHF 50,000. Based on the Singaporean electricity mix, this project prevents around 110 tons of CO_2 emissions per year.

Even in buildings that look modern, an enormous amount of energy can be saved. In a building of the University of Technology in Singapore, annual energy costs were reduced by CHF 50,000 through the use of Belimo energy valves.

3.7 Belimo as an Investment Case

This study does not focus on the Belimo investment case, but it is worth taking a brief look at the achievements seized to date. Except for 2009, Belimo has grown continuously since it was founded, in some cases with double-digit growth rates. The operating return rose steadily and, based on the high customer benefit, has reached around 20% in recent years. The strong cash flow enables the company to expand capacity on its own and at the same time to pay a substantial, rising dividend to its shareholders.

Belimo is ideally equipped for the challenges ahead. The digitalisation of products was driven forward at an early stage, so that 'intelligent buildings' offer more opportunities than risks. Geographically, the greatest potential lies in Asia. Urbanisation and the trend towards greater energy efficiency and a healthy indoor climate indicate further opportunities for growth. We are convinced that shareholders will be able to enjoy many more chapters in Belimo's success story.

"An efficient use of energy lies in our DNA. We are pleased that this fact is attracting increasing attention in the capital market."

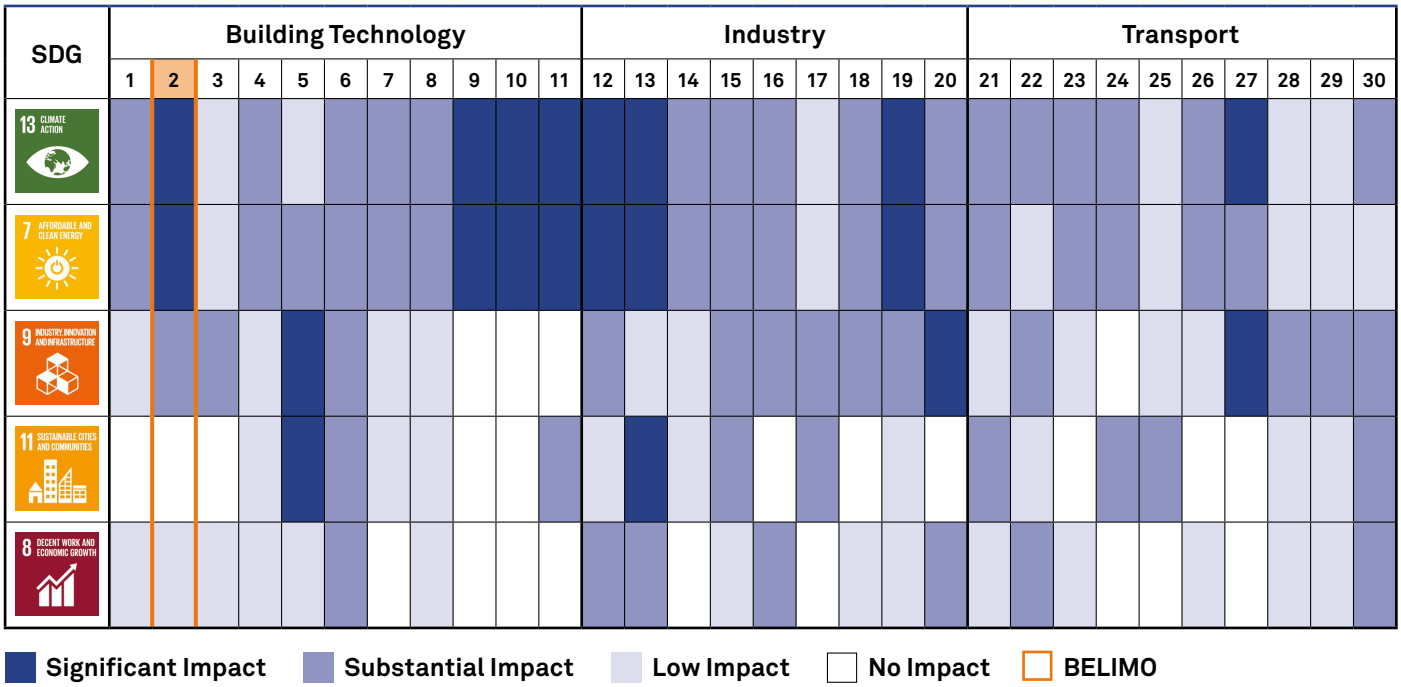
Lars van der Haegen, CEO Belimo

4. CONCLUSION

4.1 Overview of Impact

Belimo fits excellently into the portfolio of the Carnot Efficient Energy Fund. Like many other companies, the company achieves a very high impact with its products in the sense of the sustainable development goals “climate action” (No. 13) and “affordable and clean energy” (No. 7). The following table (“heat map”) provides an overview of the impact of the 30 portfolio companies, broken down by SDG. The evaluated impact ranges from dark blue (significant) to white, where we did not find any impact.

30 Portfolio Companies of the Carnot Efficient Energy Fund at a Glance



Belimo is Nr. 2 in the chart. Further examples from the industrial and transport sectors include: Rotork (UK) Nr. 20, EMS Chemie (CH) Nr. 21.

4.2 “Double Bottom Line”: Financial Return and Impact

✓ Impact investing is not a matter of pure philanthropy, in which the effect is prioritized at the expense of the return. A socio-ecological self-image can be combined without contradiction with a profit-oriented investment policy. Sustainable investment is a risk management instrument and is used specifically to improve performance. In the meantime, it can be statistically proven that sustainable investment does not mean having to forego returns.[8]

a) Profitability

✓ The development of more efficient products, services, processes and activities leads to a reduction in consumption, which makes the use of resources sustainable (= increase in efficiency). The demand for these products and services is increasing, helping companies to increase their sales and profits.

✓ The in-house application of consumption reduction measures improves the performance parameters of the company itself, which also has a positive effect on the financial return.

b) Positive Social & Environmental Impacts

The promotion of sustainable enterprises can even provide an additional yield:

✓ Sustainable companies are better at dealing with risks, because what is measured is also managed. More ecological processes reduce environmental risks, social criteria and governance standards minimize reputational risks.

✓ There are positive social and ecological effects both in the short and long term: For Example: Falling energy consumption reduces the use of resources for energy production and emissions in the short term, and in the long term reduces the impact on climate change.

Energy and Resource Efficiency: Double Bottom Line

* See Edward Freeman: Strategic Management, A Stakeholder Approach (1984)

8 See CEE, CER, Funds / Studies

4.3 Outlook

The integration of Impact into the investment process is highly dynamic. Today, the discussion increasingly revolves around the question of how impact can improve investment performance (rather than whether these aspects should be considered at all). Here the financial markets are at the beginning of a development that is going through a maturing process – in the spirit of "The first step has been taken, but we still have a long way to go".

Everyone is affected by the changing environment. Many investors focus their analysis on the risks and try to reduce them through exclusion criteria. More and more often, however, the opportunities that present themselves are coming to the foreground. Changing framework conditions lead to new products and services with huge potential – this is Impact as Business Model!

In our daily work, we can see that these opportunities are increasingly being assessed by the capital market. While 'sustainable societies' were still trading at discounts ten years ago due to (supposedly?) diminished profit prospects, today there seems to be a premium for societies that can curb climate change and resource use.

We hope that this study has given you an exciting and valuable insight. We look forward to your feedback and further discussions!

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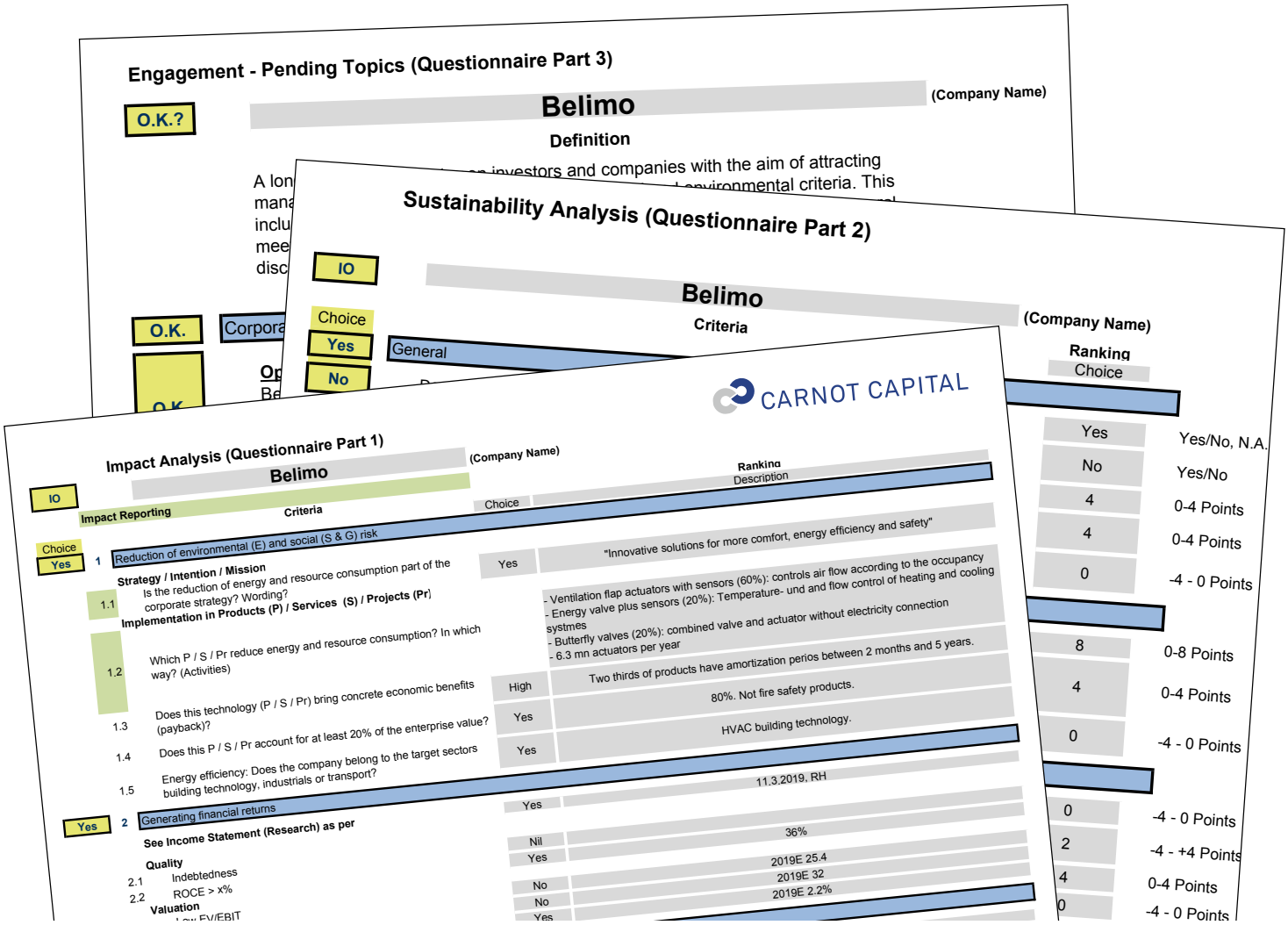
Belimo: Carnot Impact Questionnaires



5. WHO IS CARNOT CAPITAL AG?

Carnot Capital is an investment management company, specialized in energy and resource efficiency. We founded the company in 2007 in Zurich and received 2013 the permission as an asset manager for collective investments by the Swiss Financial Markets Supervisory Authority FINMA.

We manage the equity funds Carnot Efficient Energy and Carnot Efficient Resources performing a sustainability examination ESG. We buy stocks of listed companies with products and technologies, that lower the consumption of natural resources. Due to rising scarcity and increasing environmental problems, those companies profit from structural growth. The stock picking is based on a value approach, where the quality of the company is central. We only invest in established, profitable companies with strong balance sheets.

Carnot Impact Investing is a blended approach, which differentiates itself through financial as well as social-ecological performance and by combining these two qualities and revealing the positive effects they have achieved (impact from ESG & SDG mapping).

The name Carnot Capital refers to the French physicist Nicolas Léonard Sadi Carnot (1796–1834) who was able to define the maximum physical efficiency of a steam engine. Improving energy efficiency is nothing more than increasing the level of efficiency when converting primary energy to useable energy. To a certain extent, we relate maximizing the degree of efficiency to our investment activities as well: Applying strict risk-return criteria and that's why our creed is: Investments featuring a maximum degree of efficiency.

www.carnotcapital.com

Research Paper

Investments into Energy and Resource Efficiency with a Measurable Impact
By Dr. Andreas Walther, Chief Impact Officer

> https://www.carnotcapital.com/_pdf/dokumente/Carnot_Capital_Research_Paper_Impact_Investing_in_Public_Equities_EN.pdf

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