



## CHOCOLATE STELLA BERNRAIN

## SUSTAINABILITY REPORT

**BASELINE 2022** 

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### Introduction

This is Chocolat Stella Bernrain's first sustainability report. Its purpose is to present a comprehensive overview of the company's endeavors in various sustainability domains. In doing so, we will not only focus on the current state but also shine a light on the sustainability initiatives spanning the company's entire history. This report serves as a baseline and will support the company in defining, adjusting, and managing its sustainability goals and the measures taken to reach these goals.

The Global Reporting Initiative (GRI) standard served as the basis for the structure of this report. However, the report is not GRI certified.



At Café Stella

### Foreword from the Management

As an independent Swiss family business, we embrace values such as reliability, predictability, credibility, and professionalism. For generations, our primary focus has been on delivering the joy of excellent chocolate. We take great care in ensuring a fair approach to both people and the environment.

Sustainability has been ingrained in our corporate values since the inception of the company. Whenever possible, we source our raw materials directly from the countries of origin, collaborating with farmers and cooperatives with whom we have longstanding partnerships. The majority of our ingredients are organic and Fairtrade certified. We are continually striving to enhance our environmental performance and minimize resource consumption, including energy and water.

For the first time, we have compiled a comprehensive report summarizing our sustainability initiatives. This response comes as a result of increasing demands from our stakeholders for more information, and we are delighted to offer detailed insights into our measures and endeavors.

On behalf of the entire management team, we wish you an enlightening and enjoyable read.

Monica Müller

CEO Chocolat Bernrain AG

Alessandra Alberti

CEO Chocolat Stella SA

#### 1. Chocolat Stella Bernrain

Chocolat Stella Bernrain is a family business producing private label chocolate, exporting to the entire world. We are a Swiss organic pioneer. We have produced one of the first Fairtrade chocolates in the world and have been committed to sustainability and quality ever since.



We are Chocolat Stella Bernrain, a Swiss premium manufacturer specializing in private label chocolates. With our headquarters in Kreuzlingen, we have been crafting exquisite Swiss chocolate for over 90 years. Our main focus lies in producing private label products for corporate clients worldwide, spanning across more than 50 countries. Remarkably, over 85 percent of our total production is dedicated to private label chocolates.

Our product range is diverse and comprehensive, covering various formats and recipes. We offer classic chocolates, organic and Fairtrade chocolates, functional products, items without added sugar, promotional and seasonal products, a delightful array of confectionery creations, as well as kosher and halal products.

As a private label chocolate factory, we take pride in our comprehensive chocolate expertise. Our collaboration with clients extends from recipe development to production and suitable packaging, ensuring that we tailor products precisely to their unique needs and preferences.

In our Kreuzlingen facility, we employ 113 people (FTE), with 70 percent working in production and 30











**Above**: the logos of our tree own brands. **Below**: Organic Toni Easter Bunny from the Chocolat Bernrain brand and three examples of 50g bars from the Chocolat Stella line.

percent in administration. Additionally, our Chocolat Stella location in Giubiasco employs 59 people (FTE).

#### Own brands

Although most of our sales are generated through private labels, we also produce for our own brands. Under the brand name *Stella* we sell a wide range of different chocolate bars in various sizes and shapes.

Under the brand name *Bernrain* we offer an assortment of Easter bunnies and other chocolate figures, particularly hollow figures, perfect for Easter and Christmas celebrations.



Die Chocolat Stella in Giubiasco

We also take great pride in our *Mascao* brand, where our focus is on sustainability. All the raw materials used in our *Mascao* chocolates are Fairtrade and organic certified, sourced from socially and environmentally responsible value chains.

Moreover, in our factory stores located in Kreuzlingen and Giubiasco, as well as in the Stella store at Bellinzona train station, we offer a diverse range of artisan chocolates and other exquisite chocolate creations.



Chocolat Stella factory store

## 1.1 A company history under the sign of sustainability

**1928:** Achille Vanotti founds Chocolat Stella, makes a name for himself with very good chocolate and realizes creative investments in the Stella brand throughout Switzerland.

**1932:** Heinrich Weibel founds the Bernrain chocolate factory and indulges customers with confectionery products, meringue kisses, Hüppen and branches.

**1947:** Walter Müller decides to go into business for himself. In the 300-year-old family home, he and his



The oldest part of the factory, built in 1956 by Karin and Walter Müller

wife Karin produce meringue kisses, branches and liqueur-filled chocolate bottles. The products sell like hot cakes and the production facilities quickly become too small.

**1950:** Karin and Walter Müller buy Chocolat Bernrain. The young family moves to Kreuzlingen with their two sons.

**1965:** Adalbert Müller follows in his parents' footsteps and, 28 years young, takes over the management of Chocolat Bernrain AG. His wife Ursula Müller manages the factory store.

**1980:** With the steady expansion, the demand for a sustainable production set up emerges. A heat recovery system saves 98 percent of freshwater consumption, reduces external energy need and lowers CO<sub>2</sub> emissions.

**1980:** Dr. Vanotti's children have no interest in continuing Chocolat Stella. He sells his company to Chocolat Bernrain AG.

**1991:** In cooperation with OS3, today's Claro Fairtrade AG, one of the first Fairtrade chocolates is developed. The cocoa is supplied by the smallholder cooperative El Ceibo from Bolivia, the sugar by the Alter Trade cooperative in the Philippines.

In the same year, the first organic chocolate is produced for Pronatec AG.

Over the years, partnerships grow with various cooperatives in South America and Asia. Chocolat Stella Bernrain supports the farmers in the construction of fermentation and drying facilities, the establishment of tree nurseries and in agricultural training.

**2001:** Monica Müller, the daughter of Adalbert and Ursula Müller, decides to pursue a career in her parents' company.

**2013:** Chocolat Stella moves into modern, new production facilities and obtains most of the energy it needs from a heat pump. In Kreuzlingen, a photovoltaic system on the warehouse roof supplies the company's own electricity.

**2014:** On customer request, the chocolates can be packed with biodegradable foil instead of aluminum foil.

Launch of the first vegan chocolate with coconut milk and coconut sugar. The bar additionally meets the requirements of organic and Fairtrade regulations.

**2015:** Chocolat Bernrain is awarded the Thurgau Motivation Prize for its innovative and sustainable business activites

**2019:** A Demeter chocolate is launched under the Stella brand.

**2021:** Chocolat Bernrain moves into the new factory extension building in Kreuzlingen.

The process energy heating / cooling is generated using the natural refrigerant ammonia. The entire electricity consumption is covered by Swiss hydropower. Large water tanks are available for energy recovery and storage.



In the new production facilities

## 1.2 Values, management and corporate structure

Chocolat Stella Bernrain's mission is to create high quality chocolate and sell it worldwide:

## We turn creative ideas into high-quality chocolate specialities.

We are guided by the following values:

#### **Customer relationship**

We prioritize a cooperative and sustainable relationship with our customers. We treat them openly and fairly, making their concerns our own. We take pride in celebrating their success and contributing our best efforts to support their endeavors. Together, we strive for mutual prosperity and growth.

#### Supplier relationship

Our goal is to establish enduring partnerships with our suppliers, built on principles of fairness, respect, and trust. We value consistency, punctuality in deliveries, and uncompromising quality in all aspects of our collaboration. Through these values, we ensure mutual benefits for both parties.

#### **Our Work Ethic**

As dedicated individuals, we wholeheartedly commit ourselves to our tasks, always prioritizing the customer's benefit. Continual improvement of our individual and collective competence is central to our ethos. We cherish teamwork and foster a pleasant working atmosphere, promoting collaboration.

#### **Food Safety and Quality**

We take utmost care in producing safe food, adhering to all legal regulations while following established recipes and procedures. Our quality system aligns with stringent international norms and standards, ensuring exceptional product quality.

#### **Employee Well-being**

The health, safety, and well-being of our employees are of paramount importance. We prioritize their safety and health through proper work organization, leadership, and training, fostering a secure and supportive environment.

#### **Our Commitment to the Environment and Society**

We view ourselves as an integral part of our social environment and embrace our responsibilities to the public. By creating stable job opportunities in our local communities, we contribute to their growth and prosperity. Our manufacturing processes prioritize environmental consciousness, aiming to reduce our ecological footprint. Additionally, we actively support a responsible trade system and play our part in financing public infrastructure. Our stance is firm against all forms of corruption and bribery, upholding ethical business practices and the human rights.

#### **The Future Ahead**

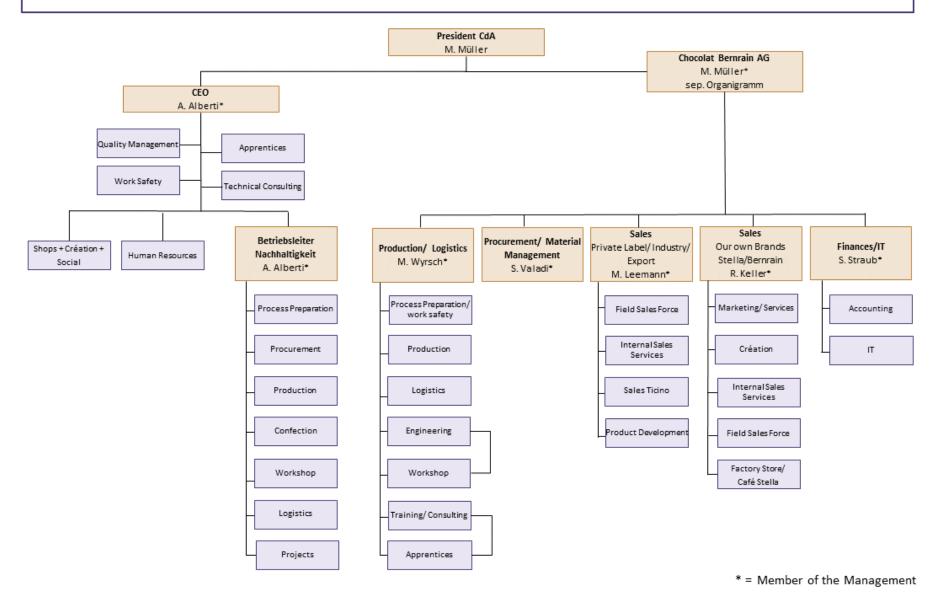
Our objective is to attain a level of earnings that supports self-financed growth, enables us to fulfill our social responsibilities, and secures our independence. We are committed to a sustainable and prosperous future, striving to uphold our values while making a positive impact in the world.

#### **Leadership Principles:**

To consistently integrate our values into our daily operations, we abide by the following leadership principles:

- We foster growth and empowerment for ourselves and our employees, encouraging continuous improvement.
- Transparency, clarity, and prompt communication are the cornerstones of our interactions, ensuring that we have the necessary information to carry out our responsibilities effectively.
- We maintain a customer-oriented mindset, collaborating seamlessly across teams and departments, both internally and externally, to deliver exceptional experiences.

#### Organisation Chart Chocolat Stella Bernrain



## Sustainability at Chocolat Stella Bernrain

Guided by the 3-pillar model (social, ecological, economic), we prioritize employee well-being and fair practices across our supply chain. As pioneers in Fairtrade and organic chocolate manufacturing, we also continuously reduce environmental emissions, striving for a greener future.



As a company, we are deeply committed to sustainability. However, the term sustainability can refer to various values and approaches, but it is often used ambiguously without clear definition or actionable steps. In this chapter, we aim to provide a comprehensive understanding of what sustainability means to us and how we translate this commitment into tangible and meaningful sustainable business practices. While the other chapters of this report shed light on our core values and the specific actions, we take to make sustainability a reality in every aspect of our operations.

#### **Definition sustainability**

Our understanding of sustainability is based on the definition in the 1987 Brundtland Report "Our Common Future" by the United Nations World Commission on Environment and Development, which states:

"Sustainable development is development that meets the needs of the present without compromising the ability for future generations to meet their own needs."

#### The 3-Pillars Model of Sustainability

At Chocolat Stella Bernrain, we embrace sustainability as a three-pillar model. This holistic approach considers the ecological, social, and economic dimensions as equally crucial components. Our commitment to sustainable development lies in ensuring a harmonious balance between these three dimensions. We believe that true sustainability can only be achieved when economic prosperity, ecological responsibility, and social well-being are in equilibrium.

#### The 2030 Agenda (SDGs)

To secure a livable and equitable future for humanity on our planet, immediate action is crucial. We must responsibly and sustainably utilize the remaining natural resources. The UN Sustainable Development Goals (SDGs) outlined in the 2030 Agenda serve as a valuable compass for this endeavor. These goals comprise social, environmental, and economic objectives, including eradicating poverty, preserving ecosystems, and fostering inclusive economic growth. At Chocolat Stella Bernrain, we align our development efforts with the SDGs, striving to make a positive impact wherever possible.



The 3-pillar model of sustainability

#### **Human Rights and Compliance**

In conducting our business activities, we uphold Swiss law without compromise. We also place great importance on ensuring that all participants in our value chain adhere to human rights principles and the fundamental conventions set forth by the International Labor Organization (ILO). Additionally, we align with the OECD/FAO Guidelines for Responsible Agricultural Supply Chains and the UN Global Compact, further reinforcing our commitment to responsible and ethical practices.

## 2.1 Sustainability in Action: A Pillar of Our Values

At Chocolat Stella Bernrain, sustainability is deeply ingrained in our corporate identity. We firmly believe that economic success must go hand-in-hand with social justice and ecological responsibility. From the very beginning, we have recognized our corporate responsibility across all three dimensions.

This comprehensive approach to sustainability influences our raw material sourcing and product manufacturing. As trailblazers in the industry, we proudly launched one of the first Fairtrade and organic chocolates in the 1990s, marking our commitment to ethical practices. Sustainability remains a foundational value, driving us to create a positive impact on society and the environment.

#### Social justice

As a family-owned company steeped in tradition, our focus lies in the long-term preservation of our business, which, in turn, creates valuable job opportunities. The well-being of our employees is of utmost importance to us, and we are committed to promoting equality among all genders and actively integrating employees with disabilities.

Moreover, we believe in paying our raw material producers a living wage, enabling them to lead lives of dignity. To achieve this, we strive to directly source many of our raw materials, such as cocoa, from farmers, especially through smallholder cooperatives that carry Fairtrade certification. By supporting such initiatives, we aim to foster social justice and contribute positively to the livelihoods of those who play a crucial role in our supply chain.

#### **Ecological Responsibility**

We place a strong emphasis on the responsible utilization of natural resources. Over the past four decades, we have been steadfast in adopting efficient energy concepts, driven by our commitment to minimizing the environmental impact of our production. As part of our eco-conscious efforts, we generate solar power from our warehouse's rooftop and employ environmentally friendly packaging materials.

In our pursuit of sustainability, we are dedicated to reducing greenhouse gas emissions wherever feasible. Nevertheless, recognizing that some emissions are unavoidable, we have been taking proactive steps since 2012. Through a collaboration with My-Climate, we participate in global carbon offset projects, allowing us to offset a portion of our emissions and contribute positively to the environment.

#### 2.2 Key sustainability issues and stakeholder interests

At Chocolat Stella Bernrain, we recognize that sustainable development encompasses numerous topics, but we focus on those aligned with our core values and corporate philosophy, such as employee well-being and climate protection. Additionally, we consider the requirements and interests of stakeholders, including customers and legislators. For instance, the EU's law on deforestation-free supply chains in 2022 and the growing demand for sustainable packaging solutions from customers have influenced our sustainability agenda. Table 1 provides an overview of the relevant stakeholders for Chocolat Stella Bernrain, guiding our approach to addressing key sustainability issues in this report.

Consequently, the following relevant sustainability issues arise for the company:

- Climate protection and responsible use of natural resources (chpt. 3)
  - o Energy consumption (chpt. 3.1)
  - Water consumption (chpt. 3.2)
  - o Packaging material (chpt. 3.3 and 4.3)
- Development and production (chpt. <u>4.1</u>)
- Sustainable raw material procurement (<u>chpt. 5</u>)
- The well-being of employees (chpt. 6)
- Regional responsibility and anchoring (chpt. 7)

The table below (Table 1) lists the stakeholders around the Stella Bernrain company. In addition, it is indicated which sustainability topics are relevant for the respective stakeholder group and which mode of communication is followed.

Table 1 Stakeholder groups of Stella Bernrain and the sustainability issues relevant to them

Stakeholder	Responsibility in	Exchange	Relevant
group	the company	frequency	Sustainability topics
Employees	Head of HR, depart- ment- & group leaders	Daily	Occupational safety, employee satisfaction, working conditions, training and continuing education
Suppliers of raw	Procurement, Sus-	Continuous ex-	Fair and collaborative business relations, quality of raw materi-
materials and	tainability Officer	change	als, delivery reliability, certification, compliance with human
packaging			rights, project work, traceability, sustainability goals of suppliers
Service providers	Production, engi-	Continuous ex-	Fair and collaborative relationships, corporate sustainability
	neering, logistics, purchasing, QM	change	goals,
Customers	Sales	Continuous ex-	Product quality, packaging, transparent supply chains, climate
		change	protection, ESG criteria, resource-efficient production, working
			conditions, certificates, audits, transparent communication
Consumers	Sales	Continuous ex- change	Product quality, packaging, labels, ingredients, sustainability
Authorities/ Of-	CEO, QM, Head of	If required, an-	Food safety, legal compliance, employee protection, occupa-
fices	HR	nually	tional safety, environmental protection, traceability
Unions	Head of HR	If needed	Fair employment conditions, collective employment agreement
Associations/	CEO, Head of HR,	When needed,	Training and education, food safety, legal compliance, ex-
Memberships	QM, R&D, Sustaina-	annually or	change of experience, sustainable supply chains, human rights,
	bility Officer	more often	climate and environmental protection
Neighborhood,	CEO	If needed	Transparent communication, support of regional associations/
Region			initiatives, emissions
Media	CEO, Marketing,	If needed	General and topic-related communication, climate protection,
	Sales		sustainable supply chains, deforestation, child labor and human rights
NGOs	CEO, Sustainability Officer	If needed	Raw materials, deforestation, child labor and human rights
Universities/ Uni-	R&D/COO	If needed	Knowledge transfer, food sensory science, innovation, product
versities of Ap-			development
plied Sciences			

## 3. Climate protection, natural resources & energy consumption

sources and put climate protection into practice. Through our steady commitment, we have achieved significant reductions in greenhouse gas emissions

E/MSY = Extinctionrate BIOSPHERE INTEGRITY BII = Biodiversity NOVEL ENTITIES STRATOSPHERIC OZONE DEPLETION FRESHWATER USE Below boundary (safe) FLOWS

commissioned in 2021

The heat pump in the energy center of Chocolat Bernrain,

Schematic representation of the Planetary Load Limits

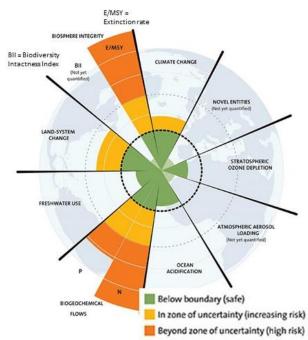
direct impacts of our production sites (Scope 1 and 2 emissions) since we lack data on various sustainability issues in other supply chain sections. However, the greenhouse gas emissions analysis presented in Chapter 3.4 covers all three scopes – direct and indirect emissions.

As a small manufacturing company, we exert the most influence on sustainability at our production sites and through the procurement of certified raw materials. Further details on sustainable supply chains are provided in the chapter on Procurement and Raw Materials.

Natural resources, including soil, clean air, water, and biodiversity, are essential for a high quality of life and a functioning society and economy. However, the excessive use and degradation of these resources threaten their regeneration potential. The overexploitation of natural resources pushes our planet's environmental systems to the limits of stability, as indicated by the concept of Planetary Boundaries. Unfortunately, we have already surpassed some boundaries, such as the loss of biosphere integrity and disruptions in biogeochemical flows like nitrogen and phosphorus. Moreover, we are approaching the brink of crossing further boundaries, particularly in climate and land use change, such as deforestation for agricultural purposes. The urgency to address these challenges is evident, and in this chapter, we will explore the measures we take to safeguard these vital natural foundations for a sustainable future.

Our business activities impact the natural environment at various points along the value chain. From raw material sourcing, where different cultivation methods can have diverse effects on biodiversity and climate, to transportation, emitting greenhouse gases and raising concerns about working conditions. During processing and chocolate manufacturing, energy, machinery, and packaging materials are utilized, each with its environmental impacts.

To reduce complexity, material consumption, energy use, water management, biodiversity, greenhouse gas emissions, and waste are treated in separate chapters. In this chapter on climate protection and natural resources, our primary focus lies on the



#### 3.1 Energy Efficiency:

We have been consistently working to improve our energy efficiency. By installing a heat pump at the Giubiasco production site, we reduced oil consumption by approximately 35% between 2010 and 2014. Further, alongside the factory extension at Bernrain in 2021, fossil energy consumption was further reduced. In 2022, only 10,400 liters of fossil fuel were burned, corresponding to 87% less compared to 2010 (see Figure 1). However, the new heat pumps led to an increase in electricity consumption at the Bernrain site.

#### **Bernrain Energy Concept:**

At Chocolat Bernrain, we produce the required cooling energy with two refrigeration units, utilizing the resulting waste heat to generate thermal energy. The heat exchangers of these machines are designed for both waste heat dissipation and cooling. In winter, cooling energy can be obtained from the outside air.

In some cases, when there is insufficient waste heat for the heat pump during cooling mode, additional heating is provided by an oil burner. The ventilation systems in Building D are equipped with recuperation circuits, reusing waste heat from the exhaust air to heat up fresh air.

#### **Stella Energy Concept:**

Following the factory extension at Chocolat Stella in 2012, we implemented a modern and efficient energy concept at our Ticino production plant. Waste heat from the chilled water circuit is used for heating during winter and transition seasons, either extracted from groundwater or the chilled water circuit. With this new system, our use of fossil fuels and CO<sub>2</sub> emissions have been reduced significantly. Today, Chocolat Stella requires fossil fuel only for the annual legionella test, making us nearly climate-neutral concerning Scope 1 emissions.



Heat and cold distribution in the Chocolat Bernrain underground

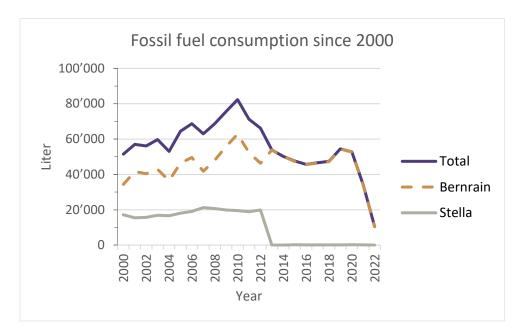
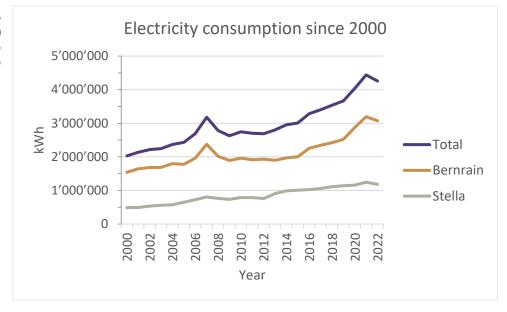


Figure 1 Fossil fuel consumption of the Chocolat Stella Bernrain Group (purple) since 2000, Bernrain in Kreuzlingen (light brown) and Stella in Giubiasco (gray).

Figure 2 Electricity consumption of the Chocolat Stella Bernrain Group (purple) since 2000, Bernrain in Kreuzlingen (light brown) and Stella in Giubiasco (gray).



#### Renewable energies

Since 2013, we have been utilizing renewable energy sources to power our operations. Our warehouse building in Kreuzlingen houses a photovoltaic system, which has been actively generating approximately 30,000 kWh of electricity annually through its solar panels. This renewable energy production accounts for 0.7% of our overall energy demand.

Throughout these years, we have made a concerted effort to cover the remaining energy demand (99.3%) at both our locations exclusively with electricity sourced from renewable energy sources, with a primary focus on hydropower. As a result, we are

proud to say that we now fulfill our entire electricity requirements using clean and sustainable energy.

#### Energy Agency for the Industry (EnAW)/ Energysaving measures

Chocolat Stella Bernrain has been committed to the EnAW SME model since 2015. Annual energy reduction targets and measures were put in place to actively decrease energy consumption, with a particular focus on reducing  $CO_2$  emissions. Thanks to our efforts, including the implementation of heat pumps in the recently built factory extensions at both sites, we have not only met, but also exceeded the target

agreements set by the EnAW (Energie-Agentur der Wirtschaft).

Despite our successful progress, we remain committed to further optimizing our energy consumption to achieve even greater reductions. In the upcoming period, we have planned several measures to continue our energy-saving journey. These include a complete conversion to LED lighting throughout the plant, modifying the chocolate molding washing machine to operate in an energy-efficient manner, and insulating hot water pipes.

Moreover, we recently took steps to enhance energy efficiency by reducing the hot water temperature of the heat pump from 75 to 65°C and optimizing the ventilation circulation rate.

By consistently implementing these measures and maintaining our partnership with the EnAW, we are dedicated to making significant strides towards a more sustainable and environmentally responsible operation.

#### 3.2 Water consumption

With the implementation of the 1982 energy concept, 98 percent of the water consumption at Chocolat Bernrain was saved in the long term. Water consumption at Chocolat Stella was also reduced by 75 percent in 2012/ 2013. In 2022, Bernrain consumed 5743 m³ of fresh water and Stella 2141 m³.



Chiller in the refrigeration center in the new building (2021)

#### 3.3 Packaging material

Packaging material usage is a crucial aspect of sustainability, alongside the consumption of agricultural raw materials and energy. Proper management of packaging is essential as it impacts waste generation and recycling, which, in turn, requires energy resources. Therefore, we strive to optimize our packaging solutions for greater sustainability, as elaborated in chapter 4 Development, production and sales.

In Table 2, you can find the data on the amount of packaging material utilized in the year 2021. Additionally, Figure 3 illustrates the development of our usage of the compostable NatureFlex<sup>TM</sup> film.

#### Use of recycled packaging materials

In the context of food packaging, ensuring food safety is of utmost importance, which can make the use of recycled materials challenging.

Regarding our primary packaging, only the aluminum foil includes secondary raw materials<sup>1</sup>.. However, the recycled content in the aluminum foil cannot be specified by the manufacturer, as it varies based on market conditions in aluminum recycling.

For all other primary packaging materials, we exclusively use primary raw materials to maintain stringent food safety standards.

In the case of secondary packaging, such as paper wraps and cardboard cases, we do not incorporate recycled materials.

As for tertiary packaging, which includes displays and folding boxes, we do utilize recycled cardboard to some extent. Out of the 148 tons of cardboard used annually for tertiary packaging, approximately 31% is made from recycled raw materials. This amounts to about 19% of our total cardboard consumption comprising recycled materials.

**Table 2** List of material consumption in 2021 for packaging and logistics, along with the corresponding emission factors (EF) and CO₂e emissions. The weight and emissions figures are estimates derived from the greenhouse gas analysis we conducted for the year 2021. The weight estimation is based on the purchase statistics. For certain items where the weight was not known, the weight was estimated using Greenly's software.

Material	weight (kg)	EF (kgCO₂/kg)	tCO₂e
Cardboard	237.3	0.39	97
Wood	85.3	0.04	3
Plastic (PP)	71.8	1.90	137
Paper	24.6	1.20	30
NatureFlex foil	23.1	5.05	119
Plastic (PE)	21.8	2.31	50
Aluminum	9.5	5.59	53
Plastic (various)	0.8	2.38	4
Plastic (PET)	0.5	3.12	1

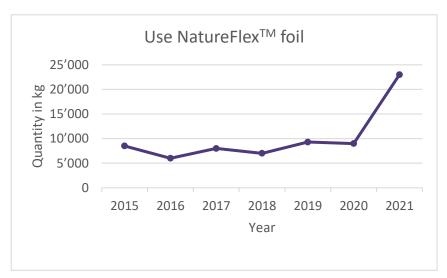


Figure 3: Annual consumption of NatureFlex compostable foil

<sup>&</sup>lt;sup>1</sup> Primary raw materials are directly sourced from the natural environment and enter the material cycle for the first time while secondary raw materials are sourced from recycling processes.

#### 3.4 Greenhouse gas emissions

In recent times, Chocolat Stella Bernrain has been consistently reducing its greenhouse gas emissions  $(CO_2e)$ , approaching the goal of becoming climate neutral in scope 1 and 2. However, to comprehensively assess a company's climate impact, consideration must extend to the entire value chain, both upstream and downstream (known as Scope 3 or indirect emissions). A company's influence on emissions resonates indirectly throughout the value chain, impacting areas like raw material choices and supplier relationships.

To gain a comprehensive understanding of our CO₂e footprint across the entire value chain, we collaborated with the consulting firm Greenly to analyze greenhouse gas (GHG) emissions for the fiscal year 2021. The GHG emissions analysis adheres to the GHG Protocol's guidelines, categorizing emissions into Scopes 1, 2, and 3.

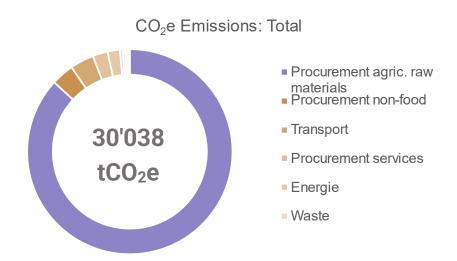
Scope 1 includes emissions directly originating from production sites. Examples include CO<sub>2</sub>e emissions from burning fossil fuels for heat generation and emissions stemming from company-owned vehicles. Scope 2 comprises indirect emissions arising from purchased energy generation, like electricity.

Scope 3 encompasses all other emissions arising along the value chain. This includes emissions from raw material cultivation, transportation, commuter traffic, and packaging disposal.

By undertaking this comprehensive analysis, we aim to holistically address our environmental impact and make informed decisions to further reduce our carbon footprint across the entirety of our operations.

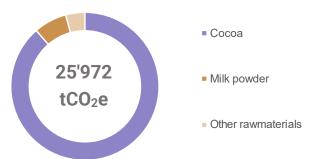
## 3.4.1 The results of the greenhouse gas emission analysis (2021)

In the year 2021, the collective CO<sub>2</sub>e emissions across our entire value chain totaled 30,038 metric tons. This figure is equivalent to the annual emissions of approximately 2,200 inhabitants of Switzerland or the amount of CO<sub>2</sub>e that a forest covering 27 km2 could absorb annually. Notably, a significant 98.6% of these total emissions fall within Scope 3, containing both upstream and downstream segments of the value chain. A minor portion, 1.1%, falls under Scope 2, involving external energy production, and a mere 0.4% is attributed to Scope 1, covering direct emissions. The subsequent sections delve deeper into a comprehensive analysis of these emissions.



**Figure 4** Breakdown of Chocolat Stella Bernrain's total emissions (Scope 1-3) into different categories. Total emissions in 2021 amounted to 30'038 tCO<sub>2</sub>e. - Shares of the different categories in total emissions: Procurement agricultural raw materials: 86.5%, Procurement non-food: 3.6%, Transportation: 3.7%, Procurement services: 2.4%, Energy: 1.9%, Facilities & buildings: 0.5%, Waste: 0.5%, Other: 0.9%.

## CO<sub>2</sub>e Emissionen: Procurement agricultural raw materials



#### 87% of total emissions

**Figure 5:** Breakdown of emissions from the category procurement of agricultural raw materials. Cocoa: 88.6%, Milk powder: 7.2%, Other ingredients: 4.2%

## Scope 3 - The upstream and downstream value chain

According to Greenly's GHG analysis, 29'620 tCO<sub>2</sub>e are emitted in our upstream and downstream value chain. This includes raw materials, transport, purchase of services, procurement of packaging materials and other operational inputs.

#### **Procurement**

Emissions from our agricultural raw materials total  $25,972 \text{ tCO}_2\text{e}$ . In accordance with the analysis, cocoa accounts for 88.6%, milk powder for 9.2%, and the remaining ingredients for 1.9% (Figure 5).

For other materials procured by Chocolat Stella Bernrain in 2021, emissions amount to 1,083  $tCO_2e$ , with packaging materials like paper, plastic, and cardboard constituting 54.8% (refer to Figure 6).

#### **Transportation**

Transportation contributes 4% of the total emissions, totaling 1,121 tCO<sub>2</sub>e. Within transportation emissions, road transport comprises 59.8%, while ocean freight constitutes 28.4% (Figure 7).

#### **Transportation - Export**

As products are sold Ex Works and customer-organized transport is involved in exports, these emissions are not factored into our greenhouse gas inventory. This approach is logical, as the responsibility for these emissions lies with the customer. However, it's important to acknowledge that these emissions are part of the downstream value chain .

#### CO2e Emissions: Procurement NonFood

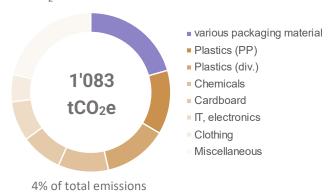


Figure 6: Breakdown of emissions from the non-food procurement category. Paper: 20.5%, plastic (PP): 13%, plastic (miscellaneous): 12.9%, chemicals: 10.2%, cardboard: 8.4%, IT, electronics: 8.1%, clothing 5.5%, miscellaneous: 21.4%.

When considering Ex Works transport emissions (380 tCO $_2$ e), the overall transport emissions reach 1,499 tCO $_2$ e. Consequently, when accounting for customer transports, total transport emissions surge by 34% compared to the 1'121 tCO $_2$ e form the analysis.

# Transportation (cargo vessel) Transportation (truck)

Shipment (to customers)

Storage & logistics

CO2e Emissionen: Transportation

4% of total emissions

tCO2e

**Figure 7** Breakdown of emissions from the transport category. Delivery (ship): 32.2%, Delivery (truck): 35.1%, Deliveries in Switzerland and internal transport between the two sites Kreuzlingen and Giubiasco: 32.7%, Warehouse & Logistics: 13.38

## CO2e Emissionen: Energy



2% of total emissions

Figure 8 Breakdown of emissions from the energy category. Electricity Bernrain: 58.2%, Electricity Stella: 22.8, Heating oil: 19.1%.

#### Scope 1 and 2 - Energy

The electricity procured by Chocolat Stella Bernrain (Scope 2) and the petroleum used for winter heat generation, alongside the heat pumps (Scope 1), collectively result in 580 tCO2e, constituting 2% of the overall emissions (Figure 8).

#### **Emission factors and calculation uncertainty**

Emission factors (EF) and the associated calculation uncertainty play a vital role in GHG emission analyses. These EF values estimate emitted tCO₂e based on activities and processes involved in production. For instance, an EF of 10 for cocoa implies that 1 kg of cocoa generates 10 kg of tCO2e. Calculating EF involves assessing all cocoa production elements, such as fertilizer use or land clearing for cultivation, leading to diverse EF values due to varying impact levels across different regions.

Our cocoa primarily originates from Peru and the Dominican Republic. However, for the latter, Greenly lacked a country-specific EF in their database. In accordance with the GHG Protocol methodology used for our analysis, we turned to the Global EF for cocoa, representing the average emissions value worldwide (19.8). This approach, while consistent, significantly overestimates cocoa emissions. Had we applied the same EF as for Peru to all Latin American countries, emissions would decrease by 13,613.7 t CO<sub>2</sub>e, reducing total emissions by 42.1% (Figure 9). This underscores the need for precise, region-specific EF values for more accurate assessments.

Sensitivity analysis Cocoa EF (total emissions)

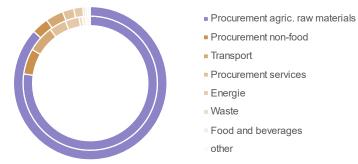


Figure 9 Both rings represent the shares of the different categories in the total emissions. For the outer ring, the global EF value for cocoa from Ecuador, Dom. Rep., Costa Rica, Panama, Bolivia, Brazil, Colombia, Nicaragua and Venezuela, the global EF value for cocoa (19.6) was used, as the consulting company Greenly did not have specific EF values available for these countries.

For the inner ring, the EF value for cocoa from Peru (4.53) was assumed for all Latin American countries.

#### **Next steps**

While our efforts in climate protection are commendable, there are further opportunities to intensify our commitment to reducing our climate impact. Building upon Greenly's GHG emissions analysis, the following potential measures stand out:

- Decrease the consumption of dairy products, including milk powder.
- Ensure our cocoa sourcing practices do not contribute to rainforest deforestation.
- Reduce our usage of packaging materials.
- Explore alternative propulsion systems for road transportation, such as biogas, hydrogen, and electric options.
- Engage key partners in our climate strat-
- Expand the installation of solar panels on our factory roofs.

#### 3.5 Climate financing

Through our partnership with MyClimate since 2012, both us and our customers have been consistently contributing to climate protection projects. Over the past decade, in collaboration with our customers, we've successfully offset 10,385 tons of  $CO_2$  equivalent emissions. To achieve this, we've allocated a total of 292,000 Swiss Francs to support projects dedicated to preserving or expanding natural carbon sinks and emission reduction. Notably, when focusing solely on our own brands, we've offset 4,119 tons of  $CO_2$  equivalent, valued at 114,058 Swiss Francs (refer to Table 3). This ongoing commitment underlines our dedication to environmentally responsible practices.

**Table 3:** Tons of  $CO_2e$  offset over the last 10 years by Chocolat Stella Bernrain and its customers through the MyClimate foundation. The emissions were compensated at a rate of CHF 27.50-28 per  $CO_2e$  (depending on the climate protection project). The emissions were calculated based on the sales volume of MyClimate-certified products. The left columns display the emissions and offset contributions of our own brands, and the right columns show those of our customers.

Own lables			Private lables	
Jahr	t CO₂e	CHF	t CO₂e	CHF
2022	192	5233	-192	-5233
2021	93	2550	-93	-2550
2020	248	6757	-248	-6757
2019	105	2867	-105	-2867
2018	194	5293	-194	-5293
2017	886	24813	-886	-24813
2016	845	23226	-845	-23226
2015	778	21795	-778	-21795
2014	363	10027	-363	-10027
2013	381	10472	-381	-10472
2012	34	1025	0	0

## 4. Product development, production and sale

We drive our company's sustainability through recipe, product, and process development, optimizing production methods and offering diverse vegan alternatives to milk chocolate. Additionally, we connect with customers who share our values, ensuring a shared commitment to our principles.



This chapter illustrates how Stella Bernrain's sustainability is influenced across development, recipes, production, marketing, and sales domains.

#### 4.1 Development and production

As a Swiss chocolate producer, with over 85% of our products being private label for other companies. Our approach to developing new products is notably versatile and intricate. Our infrastructure is adept at accommodating special raw materials, unique shapes, and allergen-free chocolate, boasting a diverse catalog of over 2000 different items.

We specialize in crafting bespoke chocolate products, encompassing an array of recipes spanning classic, organic, and Fairtrade chocolate, functional offerings, sugar-free alternatives, promotional and seasonal treats, confectionery creations, as well as kosher and halal products. When the desired recipe isn't already available, we craft entirely new recipes tailored precisely to the customer's preferences.

Developing a new product typically involves a multimonth process. Sustainability is a guiding principle throughout, factoring in consumer health and safety,



In the development of new formulations

raw materials, manufacturing procedures, and packaging considerations.

#### Recipes for sustainable chocolate

Pioneering the introduction of Switzerland's inaugural organic and Fairtrade chocolate in 1991, we remain at the forefront of organic and Fairtrade confections. A significant portion of our chocolates, along with over half of our raw materials, adhere to organic standards. Furthermore, organic components frequently find their way into our conventional chocolates, while our organic recipes often incorporate Bio Suisse materials.

In 2014, Chocolat Stella Bernrain unveiled its first vegan chocolate, sparking an ongoing expansion of vegan products in our portfolio that matches the taste of milk chocolate. Impressively, more than half of our proprietary product line consists of dairy-free dark chocolates.

Our Chocolat Stella line features sugar-free chocolates. The inception of our first no-sugar-added bar dates back to 1960. Catering to the growing demand for reduced or absent added sugars, these chocolates have become sought-after by health-conscious consumers and diabetics alike. Our raw material selection includes alternatives like agave sugar, coconut sugar, date sugar, and whole cane sugar.

Our chocolate recipes emphasize minimal additives and natural ingredients. Additives like lecithin are utilized only when necessary or desired.

If specific raw materials are not part of our current assortment, new ones are procured based on customer requests. To ensure prudent purchases,



The Vegan chocolates of the Stella line

minimum order quantities are assessed in advance, preventing waste by ensuring raw materials are utilized within their designated shelf life.

Excess production is rarely discarded. Instead, it's either sold in factory outlets or, when feasible, reintegrated into future production cycles (rework). This process is executed while meticulously upholding product quality. Any chocolate unsuitable for rework is repurposed as animal feed or channeled into biogas plants, exemplifying our unwavering dedication to sustainability.

#### **Optimized production and recipe adjustments**

For tailored recipes, production commences at a minimum order quantity of one ton. Our production facility is equipped with variously sized conches and rolling mills, ideally suited for these smaller batch sizes.

We ensure that investments in new developments remain economically feasible for our clients, always staying receptive to novel technologies and systems. With an expansive product range exceeding 2000 items and a century-long corporate history, it's crucial to modernize older recipes as well. This includes optimizing aspects like fineness and conching times.

#### **Rolling Mills:**

Essential chocolate ingredients, such as sugar, cocoa mass, and hazelnuts, undergo an energy-intensive rolling process to attain the requisite degree of fineness for a delightful melt-in-the-mouth experience. While chocolate was previously rolled to a fineness of 14  $\mu$ m, the current standard of 18  $\mu$ m minimizes

energy consumption without compromising chocolate quality. Though particles may be slightly coarser, their presence is imperceptible on the palate.

#### Conching:

Traditionally, chocolates were conched for up to 72 hours to eliminate cocoa-acid components through mechanical energy. Modern machinery permits briefer and energy-efficient conching durations. Only specialized and high-cocoa-content chocolates necessitate conching times of up to 72 hours.



Here cocoa mass is rolled

#### 4.2 Quality assurance

The safety and well-being of our consumers remain our utmost priority. We uphold stringent hygiene standards throughout production, employing measures such as metal detectors to ensure product integrity. Our production processes undergo regular scrutiny checks following the HACCP approach, refining them when necessary.

Our company proudly holds FSSC certification under the GFSI standard, while also adhering to other quality benchmarks like Bio Suisse, Rainforest Alliance, Fairtrade, Kosher, Halal, and Lactose-free, catering to specific client needs. Regular audits by regional authorities further validate our compliance.

A rigorous quality regimen governs our raw materials, semi-finished products, and finished goods. Raw materials undergo comprehensive analyses to adhere to food regulations. Cocoa bean batches, for instance, are examined for pesticides, heavy metals,





Left: Before a cocoa batch is purchased, is assessed for its sensory attributes by an expert panel - Right: The cut test checks the quality of the cocoa beans

and sensory attributes by expert panels. Meticulously calibrated production processes and associated tests ensure optimal quality for our customers.

Our products' shelf lives are continuously established through thorough shelf-life testing. As food producers, we are obligated to maintain a traceability system, enabled by our ERP system. This system allows us to swiftly retrieve comprehensive product delivery details and trace raw materials to their origins if necessary.

#### 4.3 Packing

Packaging for chocolate and other food items serves multiple critical functions. It shields them from external factors such as light, moisture, contaminants, and physical harm, thereby extending their shelf life. Moreover, packaging conveys essential consumer information, including ingredient lists, nutritional data, weight details, and manufacturer identity.

Our paper- and cardboard-based chocolate packaging exclusively employs FSC-certified materials, reflecting our commitment to sustainability. We actively explore innovative solutions and embrace cutting-edge advancements in sustainable packaging.

#### Two-stage packaging

Utilizing a two-stage approach, our chocolate bars are initially wrapped in foil and subsequently encased in paper or cardboard. This dual-layer packaging offers flexibility in both primary and secondary packaging, featuring options like aluminum, opaque polypropylene (OPP), or compostable Nature-Flex foil for the primary wrapping.

#### Recyclable aluminum

Aluminum remains a timeless choice for primary chocolate packaging. Renowned for its hygiene benefits, prolonged shelf life, and recyclability, aluminum foil stands out. Its impermeability to light, air, and water provides unparalleled physical protection to the product.

#### **Compostable foil**

Starting from 2012, we've progressively adopted compostable packaging foil as the primary choice for a growing array of products. This foil is composed of FSC-certified wood material and is thus based on renewable resources. An ultra-thin aluminum layer is infused into the foil to safeguard the chocolate against light and oxygen, with this layer being a mere seventeen times thinner than standard chocolate packaging film. Remarkably, despite the aluminum inclusion, this packaging remains conducive to home composting.

#### Paper based flowpack

In our commitment to minimizing future packaging material demand, we are currently implementing a process that allows for single-stage packaging. This innovative approach involves flowpack wrapping, including the option for the use of paper-based materials that are fully recyclable. By achieving material reduction and introducing recyclable packaging, we are poised to take a next step towards a more sustainable future.



For the packaging machine

#### **Bulk chocolate**

In our pursuit of minimizing packaging, we also provide the option of bulk, unpackaged chocolate. This offering proves especially beneficial for zero-waste stores and market-style retail setups. Furthermore, we cater to larger industries by supplying liquid chocolate/ couverture, available in buckets or even containers.

#### 4.4 Transport

For international customers, our products are primarily transported via trucks and ships, with air freight used as a last resort in exceptional cases. Notably, customers are accountable for arranging transportation from our production facilities to their respective points of sale.

#### 4.5 Customer satisfaction

Our enduring customer relationships are evidence of the exceptional satisfaction derived from our work. Our products regularly earn recognition and awards for their outstanding quality. A recent example is our Easter bunny creation, Flora, which triumphed in a tasting event at A bon entendeur (RTS), where especially the tasty cocoa note, the texture and the breaking properties of the chocolate were praised.

#### 4.6 Marketing and communication

Chocolat Bernrain's sustainability information is currently accessible to customers through the website and factsheets. However, this dissemination has been passive in nature. There is a notable absence of a comprehensive strategy for actively and consistently communicating our multifaceted commitments, particularly in the realm of online channels.

This shortfall occasionally leads to a lack of clarity when seeking such information, potentially causing potential customers to favor competitors with more proactive communication approaches. Recognizing this limitation, we are dedicated to enhancing our communication practices.

From 2023 onwards, we have embarked on a proactive endeavor to engage customers through online platforms. Initial trials have shown positive responses, particularly from startups and smaller clientele. Such online engagement also holds the potential to contribute positively to our CO<sub>2</sub> emissions reduction, partially substituting traditional trade fair attendance and subsequently diminishing employee travel distances. In the long run, these digital initiatives might even supplant some of our reliance on trade fairs. However, it is important to acknowledge that trade fairs continue to offer valuable opportunities for fostering relationships with current clients and forging connections with potential new customers

#### 5. Procurement and raw materials

A large part of our raw materials are Fairtrade and organic certified. We buy cocoa mainly directly from smallholder cooperatives in Latin America. In addition to certified raw materials, we are involved in various initiatives and projects for sustainable chocolate supply chains.



**Table 4** Proportions of purchased organic and Fairtrade certified cocoa products (butter and mass) since 2017. Conventional cocoa is always Rainforest Alliance (RA) certified at our company. Fairtrade cocoa is always certified organic and vice versa.

This chapter explains which certifications we rely on and how we work with suppliers to ensure a supply of sustainably produced raw materials. It also sheds light on how we work in our supply chain to promote sustainability beyond the purchase of certified raw materials.

#### We are organic and fairtrade experts

A substantial majority of our agricultural raw materials (approximately 80%) hold dual Fairtrade and organic certifications (refer to Table 4). We have consistently upheld a collaborative partnership with our producers as a central principle. Ensuring a sustainable livelihood for cocoa farmers is paramount, prompting us to pay above-standard prices for our raw materials. Presently, diverse certifications underscore our commitment to ethically sourced materials. Our pioneering spirit dates back to 1991 when we collaborated with OS3, now known as Claro Fairtrade AG, to create one of the first fairtrade chocolates.



#### **Traceability**

We are dedicated to ensuring the traceability of our raw materials, offering specific details about the country of origin and the corresponding producer cooperative for each Fairtrade product. Our approach goes beyond the requirements of the Max Havelaar Fairtrade seal's Mass Balance System, grounded in a physical traceability system that underscores our commitment to transparency.









Impressions from the cocoa cooperatives (1/2) from left to right: Centralized nursery at the APPTA coop.; farm-level nursery; cocoa plantation with legumes as cover crop and green manure near Santa Maria de Nieva, Peru(2X).









Impressions of the cacao cooperatives (2/2) On a visit to Norandino in Peru. From left to right: Cacao harvest, first the fruits have to be cut open with a machete; the raw cacao beans can be tasted; afterwards the beans are fermented for several days, during which they have to be stirred several times; before the beans can be exported, they have to be dried.

#### **Direct cooperation with cooperatives**

Our cocoa predominantly hails from smallholder cooperatives, primarily based in Latin America. We maintain enduring, personal connections with these cooperatives, consistently offering support across various domains:

<u>Pre-financing:</u> Recognizing the limited equity of many cooperatives, we facilitate pre-payment for cocoa deliveries. This empowers cooperatives to compensate farmers for their harvest when cocoa beans are collected.

<u>Project funding:</u> We contribute to cooperative projects and investments, involving initiatives like constructing drying facilities, establishing tree nurseries, and covering certification fees.

<u>Quality enhancement:</u> Through on-site training, we bolster production and elevate cocoa quality. This empowers cocoa producers to refine their expertise, yield higher quality cocoa, and consequently command better prices in the market.

#### **Labels and certifications**

Certifications and labels play a pivotal role in advancing social, environmental, and economic sustainability across the cocoa value chain.

The Max Havelaar Fairtrade seal ensures that cocoa farmers receive the Fairtrade minimum price when the global market price falls short. Additionally, producer organizations benefit from a Fairtrade premium, directed towards community projects. For cocoa that is also certified organic – a characteristic of nearly all our Fairtrade raw materials – an extra fee is allocated for certification and quality.

Child labor remains a concern, particularly in West Africa. Since 2016, all cocoa raw materials sourced from this region carry the Rainforest Alliance/ UTZ or Fairtrade seal. These certification not only prohibit child labor but also actively prevent it from taking root.













To guarantee a sustainable supply chain, we rely on the following certifications: EU Organic, Bio Suisse, Demeter, Fairtrade Max Havelar, Rainforest Alliance and FSC.

#### Cocoa is a risk-raw material

Despite certifications like Fairtrade and organic, it's important to acknowledge that complete elimination of child labor and deforestation remains a complex challenge. Within cocoa cultivation, children frequently engage in fieldwork alongside their families, assisting with labor-intensive tasks. However, this becomes classified as child labor only if it involves hazardous activities like wielding machetes, impedes their physical and cognitive development, or results in missed schooling.

While large-scale rainforest clearance for cocoa cultivation is uncommon, smallholders often resort to periodic clearing of a few hectares due to declining productivity or the need of the younger generation for new land to secure an income. These incremental clearings collectively contribute to the adverse impact of rainforest loss. It's important to highlight that large cocoa plantations requiring extensive land clearing do indeed exist, yet our sourcing predominantly focuses on smallholder farmer cooperatives.

Child labor and deforestation are deeply rooted in structural issues such as poverty, limited alternative livelihoods, small farm size, and inadequate education among others. While certifications play a role in addressing these challenges, they cannot serve as standalone solutions.

#### 5.1 Engagement in our supply chains

This section elaborates on Chocolat Stella Bernrain's dedication to a sustainable supply chain, complementing certified raw materials and direct sourcing efforts..

#### **SWISSCO - Swiss Platform for Sustainable Cacao**



We are a member of <u>SWISSCO</u><sup>2</sup><sub>L</sub> the Swiss Platform for Sustainable Cocoa. This collaborative initiative fosters synergy among the cocoa and chocolate in-

dustry, the public sector, non-governmental organizations, and research institutes. United under the Cocoa Platform, we actively strive to enhance the well-being of cocoa farmers, conserve natural

resources, and foster biodiversity in cocoa-producing nations. Through active engagement, partnership, and transparency, we contribute to a sustainable cocoa value chain.

The <u>SWISSCO Roadmap 2030</u> aligns with selected Sustainable Development Goals (SDGs) and defines specific objectives across four key domains

- 1) Living income for cocoa farmers and their families
- 2) Deforestation-free and climate-friendly cocoa supply chain
- Tackling child labor and improving prospects for young people
- Improving transparency and traceability within the cocoa supply chain

#### **Happy Hazelnut Project, Turkey**



Chocolat Stella Bernrain actively engages in the Happy Hazelnut Project, a collaborative effort with Yourharvest AG and Işik Tarim. This initiative is

geared towards providing accommodation for migrant workers who are hired for the hazelnut harvest. The project encompasses supervised care for the workers' children during their labor hours, with a diverse range of activities at the Happyhouse, where the children are looked after. Our partnership with the Happy Hazelnut Foundation dates back to 2014. As of 2015, we exclusively source hazelnuts for our own brands from this project. Furthermore, all the organic hazelnuts we process for our customers are also obtained from this venture. In support of this cause, Stella Bernrain pays a marginally higher price for the nuts, which aids in compensating higher wages for the harvesters and the operational expenses of the project. Further insights can be found at happyhazelnut.com.

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<sup>&</sup>lt;sup>2</sup> www.cocoa-platform.ch











Impressions from the Happy Hazelnut Project from left to right: Group picture with the educator Esra Dobra; the cook who cooks for the children; hazelnut grove in the region around Izmir where the Happy Hazelnut Project is located; the children of the harvest workers play in front of the Happy House; there are also activities like painting on the program of the Happy House Summer School

#### SusChain

SusChain's<sup>3</sup> primary aim is to develop a software solution that brings absolute transparency to the entire chocolate supply chain. This cutting-edge software harnesses blockchain technology and will be freely accessible as an open-source tool for all stakeholders in the value chain. Chocolat Stella Bernrain is actively supporting this initiative financially and will actively participate in the beta phase to refine and optimize the software's performance.

At the core of SusChain's functionality is the ability to document and retain a wide spectrum of data throughout the value chain. This covers details about cocoa cultivation, trade, processing, and the various actors involved, including farmers and cooperatives. The software will even facilitate the visual mapping of cocoa farms using imported GPS data.

SusChain offers comprehensive value chain mapping through adaptable and customizable data gathering and presentation methods. Notably, it captures transactions among value chain participants, such as payments from traders to farmers or between traders. A vital component is the software's capacity to visually present data in versatile ways, allowing it to be seamlessly integrated into external websites, like an interactive map illustrating the cocoa trade route.

The potential of SusChain extends to addressing critical issues like deforestation and poverty among cocoa farmers. By instilling complete transparency and

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<sup>&</sup>lt;sup>3</sup> www.suschain.org

verifiability, the software empowers companies to collaboratively address intricate challenges.

Designed as a progressive web app, SusChain embodies elements of both a website and a smartphone app. This unique approach ensures usability not only offline but also across various devices, rendering it independent of different operating systems.

#### **APPTA Project, Costa Rica**

The project aimed to enhance the well-being of indigenous farming households in Talamanca, Costa Rica. Collaborating with Cooperative APPTA and the State Secretariat for Economic Affairs (SECO), Chocolat Stella-Bernrain contributes to this endeavor. The project employs a multifaceted strategy containing the following approaches:

- Introducing disease-resistant cocoa cultivars
- Implementing locally produced biofertilizers
- Enabling crop diversification via fruit trees and other means.

The primary aim of this initiative was to enhance the income stability of cocoa farmers. Through collaboration with the APPTA cooperative, a series of actions were undertaken to increase cocoa plantation productivity and introduce diversified cultivation systems. Farmers were assisted in rejuvenating their plantations and propagating disease-resistant cocoa varieties, as well as trained in sustainable practices including the creation and application of biofertilizers. The project reached 90 farming families and in-

#### **Biofertilizer Promotion Activities:**

- Establishing four centralized biofertilizer production facilities
- Providing training to cocoa farmers on biofertilizer production and usage
- Facilitating access to materials and equipment for individual fertilizer production

## <u>Introduction of New Varieties and Crop Systems Activities:</u>

- Assisting farmers in setting up their own nurseries
- Imparting training on grafting techniques for disease-resistant varieties and their propagation on the fields using various methods
- Distributing 6,000 fruit tree seedlings (such as citrus, acerola, guava, and coffee) to serve as the foundation for diversified cultivation systems.

Link to the project video (in German and Spanish)





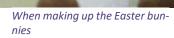


Impressions from the APPTA project from left to right: grafting the disease-resistant varieties; preparing the biofertilizer to be fermented; centralized biofertilizer production plant.

cluded the following activities:

## 6. Employees

Our employees are the backbone of our operations, and we are dedicated to offering them fulfilling and appealing work opportunities. Production staff benefit from a comprehensive collective labor agreement, allowing for flexibility and part-time arrangements. Our commitment extends to ensuring equal opportunities and pay parity for all genders and demographics.



This section delves into the foundational principles underlying our collaboration with employees, while also elucidating our approach to fostering a secure and appealing work environment.

#### **Trust and mutual support**

Trust and mutual support constitute the foundation of our company's social fabric. We foster an environment that encourages, challenges, and empowers our employees. With dedicated and skilled team members as the driving force behind our success, we collaboratively fulfill our customers' desires. Our employees play an integral role in shaping new product development, investment strategies, and production enhancements through active participation.

#### Collective labor agreement (CLA)

We are a member of Chocosuisse, the Association of Swiss Chocolate Manufacturers. Chocosuisse offers valuable assistance on diverse matters and facilitates a comprehensive collective labor agreement (CLA) tailored to the Swiss chocolate industry, encompassing our production workforce. Our remaining individual contracts align with the conditions outlined in the CLA. Social benefits.

#### **Enhanced Social Benefits**

Our social benefits surpass legal mandates in certain aspects, exemplified by the 13th month's salary disbursed without social security deductions (gross for net). We offer an appealing pension fund solution with distinctive provisions within a collective foundation, where the employer contributes a higher savings amount and employees can select between the standard or plus savings plans. Unlike legal requirements, savings contributions commence at age 20. Additional insurance benefits, such as waiting periods for sickness allowance or non-occupational

accident insurance provided by SUVA, are contractually assured, and covered by the employer. The employer has provided all employees with a daily sickness benefit insurance until the point at which IV (invalidity insurance) benefits take effect.

#### Accident and health insurance

From the first day of absence, employees are covered by insurance for occupational accidents and continued wage payment in case of illness.

#### Flexible working hours and benefits

Our flexible working hours and benefits adhere to the Chocosuisse collective labor agreement, which establishes a 5-day workweek with a 41-hour work schedule and 5 weeks of vacation. Vacation days vary, with employees enjoying 30 days up to the age of 20, 27 days from 50, and 30 days from 60 onwards. Our administration offers flexible working hours, while production operates in either one or two shifts.

We provide essential facilities like changing rooms, showers, and a break room, along with a canteen (bring your own food) for those who prefer to eat on-site. Additionally, employees have the option to enjoy lunch at our own Café Stella. All employees benefit from discounts in the choco-late stores and reduced-price Reka vouchers

#### Health and safety in the workplace

Prioritizing the well-being of our employees, we maintain a strong focus on workplace health and safety. Upholding the physical and psychological welfare of our workforce within a secure and hygienic environment, in alignment with industry standards, is of greatest importance to us.

Within every production department, stringent safety and hygiene protocols are established for each work area. New employees undergo comprehensive training on these protocols, which are periodically reinforced. Any occupational accidents are documented and assessed. Furthermore, a thorough annual review is conducted to evaluate risks and accidents.

In our commitment to accident prevention and to cultivate a culture of safety-consciousness, our dedicated safety officers regularly organize awareness sessions. We provide employees with work shoes featuring steel toecaps and appropriate work attire for their protection.

#### **Grievance mechanism**

We have established a grievance mechanism that aligns with our internal policies on upholding personal integrity. Our employees are encouraged to report any violations or misconduct, either in person or anonymously. Additionally, a structured system is in place to receive and address suggestions for enhancing production processes and organizational management. This ensures a transparent and accountable approach to addressing concerns and fostering continuous improvement.

#### **Diversity and equal opportunities**

We prioritize diversity and collaborate with local organizations and institutions to support the reintegration and training of individuals who have faced illness or injury. Our commitment to equal opportunities is reflected at all levels of our organization.

Within our management team, three out of seven members are women. Our Board of Directors also upholds gender diversity, with a female representation of 25% at Chocolat Bernrain and 66% at Chocolat Stella. Additionally, we offer a range of part-time contract options to accommodate different work arrangements.

#### **Equal pay**

Equal pay for equal work is a fundamental principle for us. An independent wage equality analysis conducted at Chocolat Bernrain in 2021 reaffirms that

there is no gender-based wage disparity between male and female employees.

#### **Home Office**

Amidst the Covid-19 pandemic, we facilitated remote work for employees in administrative departments, a practice that remains available to those who opt for it. We furnish laptops for home office purposes as needed.

#### **Ongoing Learning and Apprenticeships**

Nurturing the next generation is a priority. Chocolat Bernrain mentors 3-6 apprentices annually, while Chocolat Stella guides 1 apprentice each year in a comprehensive three-year food technologist apprenticeship. Additionally, we provide training for aspiring food technicians.

Chocolat Stella holds the distinction of being the pioneer in introducing the EFZ food technologist apprenticeship in the canton of Ticino.

We champion and facilitate professional development for our staff. Tailoring education and learning pathways to individual needs is a cornerstone, complemented by regular training programs aligned with job functions or covering pertinent company-wide subjects.

In 2022, we established a new training and consultancy role to further fortify our commitment to learning and continuous improvement.



#### Employee Retention, Tenure Acknowledgment, and Pre-Retirement Program

We take pride in our dedicated workforce with numerous long-serving members, some of whom have faithfully contributed for over four decades. Chocolat Stella enjoys an average tenure of 10 years, while Chocolat Bernrain's stands at 8 years. Employees who have been with us for more than two decades are eligible for an appealing early retirement option, supported by the company's internal endowment.

In recognition of five years or more of service, we extend milestone bonuses every quinquennium. The bonus increases with accumulated years of commitment.

We also offer our employees access to low-interest mortgage loans, demonstrating our commitment to their holistic well-being.

#### **Accessibility and commute**

Both of our facilities enjoy excellent public transport accessibility. The Kreuzlingen site benefits from a convenient bus and train stop adjacent to the company premises, while the Giubiasco location is also a short stroll away from the nearest bus and train station. To support eco-friendly commuting, an electric vehicle charging station is available. Furthermore, on-site parking is provided at no cost to our employees.

## 7. Responsibility and regional engagement

We value local engagement and take responsibility within the communities where we are situated.

Our strong connection to the regions of our production sites is evident. Chocolat Bernrain, established in 1932, has nurtured its operations in Kreuzlingen since inception. Chocolat Stella, founded in 1928 in Lugano, transitioned to the neighboring Giubiasco in 1980 and continues to flourish there..

#### **Donations and sponsoring**

We actively back local organizations, clubs, and community and cultural events. In 2021, Chocolat Stella extended its support to approximately 50 organizations and associations by supplying chocolate for various occasions.

A longstanding partnership is maintained by Chocolat Stella with <u>Inclusione Andicap Ticino</u>, based in Giubiasco, and with <u>Tavolino Magico</u>. Chocolat Bernrain regularly supports organizations such as <u>Agathu</u> (meeting place for refugees) or the <u>Arche</u> (children's project).

#### **Apartments and community gardens**

For years, a residential complex belonging to Chocolat Bernrain has been providing affordable housing in Kreuzlingen. Both employees and residents have the opportunity to lease garden plots on the company's premises.

#### **Training and education**

Chocolat Stella actively engages with schools by organizing company visits, providing students the opportunity to delve into the history of cocoa and chocolate, comprehend production processes, and grasp the economic context. We facilitate internships for secondary and university students during semesters and school breaks, allowing them to gain insights into the workings of a food company. Additionally,

Chocolat Stella arranges factory tours for aspiring confectioners annually.

Our collaboration extends to vocational schools and the University of Ticino (SUPSI), where we offer projects and thesis opportunities for students and apprentices. We frequently participate in initiatives initiated by local and regional institutions, as well as various schools..

#### **Prizes and awards**

Chocolat Stella has been honored with the Prix Égalité in 2011, a prestigious award granted by the Ticino Commercial Association, acknowledging our dedication to gender equality and equitable representation at all organizational levels. In 2012, Chocolat Stella was bestowed with the "Agiamo Insieme" prize, a recognition jointly presented by the Canton of Ticino and the Ticino Chamber of Commerce,



With the "Agiamo Insieme" award

lauding our commitment to fostering professional reintegration opportunities for individuals with disabilities.

On a similar note, Chocolat Bernrain was granted the Thurgau Motivation Award in 2015, a testament to our innovative and sustainable business approach, which has earned us admiration and distinction within the region.

founding member of the Ticino Industrial Association. Additionally, the Managing Director of Chocolat Bernrain AG, Monica Müller, holds membership in the Kreuzlingen Employers' Association..



The Managing Director Monica Müller with the Thurgau Motivation Award 2015

#### **Collaborations**

We actively seek partnerships with local enterprises to jointly create and manufacture products featuring regional ingredients. Notably, we have successfully collaborated on projects like the creation and production of a Ticino bread bar and a Ticino amaretti bar. Additionally, in association with Agromarketing Thurgau, we craft a delectable chocolate infused with locally sourced apple pieces. These ventures underscore our commitment to harnessing the essence of the region and cultivating unique offerings.

#### **Associations**

We hold membership in the Swiss Association of Chocolate Producers Chocosuisse, and our Managing Director at Chocolat Stella, Alessandra Alberti, actively serves on its Board of Directors. Several of our dedicated employees contribute their expertise to diverse commissions. Through our Managing Director of Stella SA, Alessandra Alberti, we also maintain a presence in the Chamber of Commerce of the Canton of Ticino. Furthermore, we proudly stand as a

## 8. Challenges and opportunities

In a world of continuous change, both opportunities and risks emerge. To safeguard our ongoing success, we observe and analyze these evolving dynamics. By doing so, we aim to mitigate potential risks while recognizing and capitalizing on opportunities that pave the way for our company's continued growth and progress..



This section explores a range of potential opportunities and challenges that Chocolat Stella Bernrain could encounter in the upcoming future.

#### Climate crisis

Climate change poses a significant challenge, particularly for agricultural activities, and cocoa cultivation is notably vulnerable. Shifts in climate conditions, such as increased aridity or excessive humidity, can detrimentally affect cocoa production. The implications of climate change on cocoa cultivation in our most important origins have been explored by the CGIAR through a study<sup>4</sup> focused on Central America.

For one of our key cocoa sourcing nations, the Dominican Republic, the anticipated impact of the climate crisis on cocoa production is projected to be relatively limited. Similar outcomes are observed in the case of Peru. The study suggests that around 10% of existing cropland may become unsuitable for cocoa cultivation due to projected climate alterations within the coming decades<sup>5</sup>. Notably, significant cocoa-producing regions like San Martin, Amazonas, and Cajamarca, which are of importance to us, are expected to experience relatively minimal effects from climate change<sup>6</sup>.

#### EU regulation on deforestation-free supply chains

In April 2023, the EU Parliament adopted a <u>regulation on deforestation-free supply chains</u>, and subsequently in May of the same year, the EU Council also endorsed this regulation. The anticipated effective date of implementation is set for 2025, following an

18-month adjustment period. This regulation mandates that companies trading in high-risk commodities and their derived products (such as cocoa and chocolate) within the EU must demonstrate that their production processes did not contribute to deforestation (with a cut-off date of December 31, 2022). Furthermore, these companies are required to ensure that all local laws in the country of origin were adhered to during the production of the raw materials or goods.

In order to establish that cocoa cultivation areas are free from deforestation, accurate geolocation is necessary. This undertaking involves substantial effort, and smaller cooperatives and businesses may face challenges in complying with this regulation. To address this, smaller enterprises are granted a more extended transitional period (24 Month). Nonetheless, it is plausible that this regulation could pose a more significant hurdle for small cooperatives and companies seeking access to the European market in comparison to larger corporations and entities.

Larger suppliers associated with Chocolat Stella Bernrain, such as Conacado or Norandino, are expected to encounter minimal difficulties in adhering to this regulation. However, it remains uncertain whether smaller cooperatives can fulfill the regulatory criteria with reasonable effort, especially considering the variable national and local structures and support mechanisms, influencing each case differently

<sup>&</sup>lt;sup>4</sup> Bunn et al. 2019. Climate Change Impacts on Cocoa Production in Central America and the Caribbean - Link.

<sup>&</sup>lt;sup>5</sup> Cecarelli et al. 2021; Climate change impact on cultivated and wild cacao in Peru and the search of climate change-tolerant genotypes - <u>Link</u>.

<sup>&</sup>lt;sup>6</sup> Rikolot, 2020, The impact of climate change on cocoa and coffee farmers around the globe - Link

If this regulation is effectively implemented, it could signify that all chocolate available in the EU adheres to deforestation-free standards. Notably, major corporations, often criticized for contributing to deforestation and adopting unsustainable business practices, may stand to benefit from this development. Consequently, it appears crucial for producers of organic and Fairtrade certified chocolates to proactively contemplate the implications of these unfolding changes for their respective market segments.

#### Human rights due diligence

In addition to the new deforestation-free supply chain regulation, the legal requirements for companies on human rights due diligence are also becoming increasingly stricter throughout Europe. To take this development into account, we will adapt the risk assessment and risk management of our raw material suppliers. To this end, we are in exchange with other SMEs via Chocosuisse and will also jointly develop solutions in the pre-competitive area.

## Transitioning from carbon offsetting to proactive climate action within our supply chain

Over the past decade, we partnered with the My Climate foundation to offset a portion of our emissions through climate protection initiatives worldwide.

While these endeavors made a positive impact on a global scale, they were unrelated to the intricacies of the cocoa and chocolate industry.

However, we've been reconsidering the concept of achieving carbon-neutral products solely through offsetting mechanisms. In light of this, we've made the decision to conclude our collaboration with My-Climate. Instead, we're redirecting the financial resources that were previously directed towards external climate projects to initiatives within our own supply chains.

For instance, we're currently involved in a cooperative project that focuses on promoting agroforestry systems among our partner farmers. These agroforestry systems have the potential to bring about multiple advantages, including carbon sequestration, biodiversity enhancement, increased climate resilience, and diversified revenue sources for cocoa farmers.

Our intent behind these projects is to foster collaboration within our value chain. We aspire to collectively tackle the challenges posed by climate change, moving beyond mere carbon offsetting.



Agroforstsystem in Talamanca, Costa Rica auf der Parzelle eines Farmers von APPTA.