

Wilhelm Kneitz AG

Textilwerke

SUSTAINABILITY
REPORT

2022

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| Table of contents | |
| introduction | 2 |
| About this report | 2 |
| Foreword by the Board of Directors | 2 |
| Wilhelm Kneitz AG at a glance | 3 |
| Sustainable corporate governance | 5 |
| Company portrait..... | 5 |
| Responsible corporate governance | 6 |
| Environmental management..... | 8 |
| Responsibility to society..... | 8 |
| Product responsibility | 14 |
| Value chain | 14 |
| Premium textiles..... | 16 |
| Dialog with our customers and partner companies | 16 |
| Innovations and sustainable products..... | 17 |
| ENVIRONMENT AND ENERGY | 20 |
| Energy use..... | 20 |
| Implementations for environmental protection..... | 21 |
| Waste and recycling | 21 |
| Water management | 22 |
| Our Footprint | 23 |
| Corporate Carbon Footprint..... | 23 |
| Methodology | 23 |
| Calculation and results | 24 |
| Scope 1 | 24 |
| Scope 2 | 25 |
| Scope 3 | 26 |
| Conclusion | 29 |
| Climate neutrality | 31 |
| Product Carbon Footprint | 31 |
| EMPLOYEES AND SOCIETY | 39 |
| Good working conditions | 39 |
| Occupational safety and health protection | 39 |
| Equality and diversity | 40 |
| Land, forest and water rights and forced eviction. | 40 |
| Commitment to society..... | 40 |
| Imprint..... | 42 |

INTRODUCTION

About this report

This is already the second sustainability report of Wilhelm Kneitz AG, which is published and updated annually. With the publication of our sustainability report, we give an account of how we live our corporate responsibility. In doing so, we take a position on the impact of our activities on the environment and society and describe this explained by key figures, our goals achieved to date, and future activities for managing sustainability activities.

The reporting period is the fiscal year 2021 (January 1 to December 31); comparative data for previous years are included.

For reasons of better readability, gender-specific wording and formal display of gender identities are not used. The form chosen stands for all genders (m/f/d).

Foreword by the Board of Directors

As Chairwoman of the Management Board of Wilhelm Kneitz AG, I am particularly pleased that we can report climate-neutral production for the reporting year 2022. We are proud that we, as Wilhelm Kneitz AG, have been able to achieve this goal together successfully. For us, sustainability also means taking responsibility for all our activities, both socially and ecologically: for our employees, for our region, and especially for our environment and the climate. After all, climate protection means leaving behind an environment worth living in for the next generation, something that is particularly close to our hearts as a family-run, manufacturing company. The Corona pandemic has not left us unscathed and has once again made it clear to us that a company must build on long-term and solid business practices.

We are therefore setting a good example in sustainable production sites and have already implemented a lot of activities that contribute to environmentally friendly and more energy-efficient production. For example, we have equipped almost all roof surfaces with photovoltaic systems, enabling us to cover up to 10% of our electricity requirements ourselves.

For the third year in a row, we have calculating our company-specific carbon footprint. Based on this insight, we were able to implement our goal: climate-neutral production.

Equally important to us is the impact of our actions and deeds on society. Based on the 17 Sustainable Development Goals (SDGs) of the United Nations, we demonstrate our impact on the common good. We are aware that all our entrepreneurial actions have an impact on our entire environment.

Wilhelm Kneitz AG at a glance

Since 1912, the name Wilhelm Kneitz has stood for outstanding premium textiles "Made in Germany". This tradition is a daily incentive for us to meet the growing demands of our customers at home and abroad, to continuously improve and to reinvent ourselves again and again. We succeed in this through a sustainable and holistic company policy which, in addition to the constant modernization of our machinery, places the highest value on team spirit, social responsibility and environmentally compatible production methods.

For many years, we have specialized in the production of high-quality textiles for the automotive sector. The diversity of our customers is reflected in our individually adapted product range. With competence and creativity, we produce fabrics for seat covers and trims that add value to any vehicle in terms of appearance, resilience and comfort.

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We have already achieved some successes in 2022:

**Klimaneutrale
Produktion 2022**

-8
t CO₂ äq.



**Sustainability
Development Goals**

Bei unserem Einfluss auf die Gesellschaft und die Umwelt orientieren wir uns an den 17 Nachhaltigkeitszielen der Vereinten Nationen

**Berechnung unseres
Corporate Carbon
Footprint bereits im
3.
Jahr in
Folge.**

**437
MWh**

**Eigenstromerzeugung
unserer PV-Anlage**

**Product Carbon
Footprint**

Schaft Uni Gewebe
spinnlösegefärbt

Zertifikate

Qualitätsmanagement:
DIN EN ISO 9001:2015

Umweltmanagement:
DIN EN ISO 14001:2015

Figure 1: Successes of Wilhelm Kneitz AG in the year 2022 in terms of sustainability

SUSTAINABLE CORPORATE GOVERNANCE

Company portrait

Our company history shows that as a family-run business we have been successful in the textile industry for over 110 years. Since the company was founded in 1912 at the Wirsberg site, Wilhelm Kneitz AG has proven time and again that it can react flexibly to changes in the market and adapt to changing demands and requirements.

Founded as a plush factory, the company survived the turmoil of the world wars and introduced the first raschel machines in 1970. The increasing demand for furniture velour and the high quality of our products leads to continued success and enables the continuous expansion of the product range. In 1985 Wilhelm Kneitz AG starts with the production of automotive textiles and in 1996 it deals with the development and production of technical textiles for the first time. Due to the increasing production capacity utilization for the automotive sector, the production of furniture and home textiles is discontinued in 2010. In 2011, Wilhelm Kneitz AG sets a clear sign for the conscious handling of the environment with the installation and operation of photovoltaic systems for own power generation. In 2022, the fourth-generation family-run company celebrates its 110th birthday.

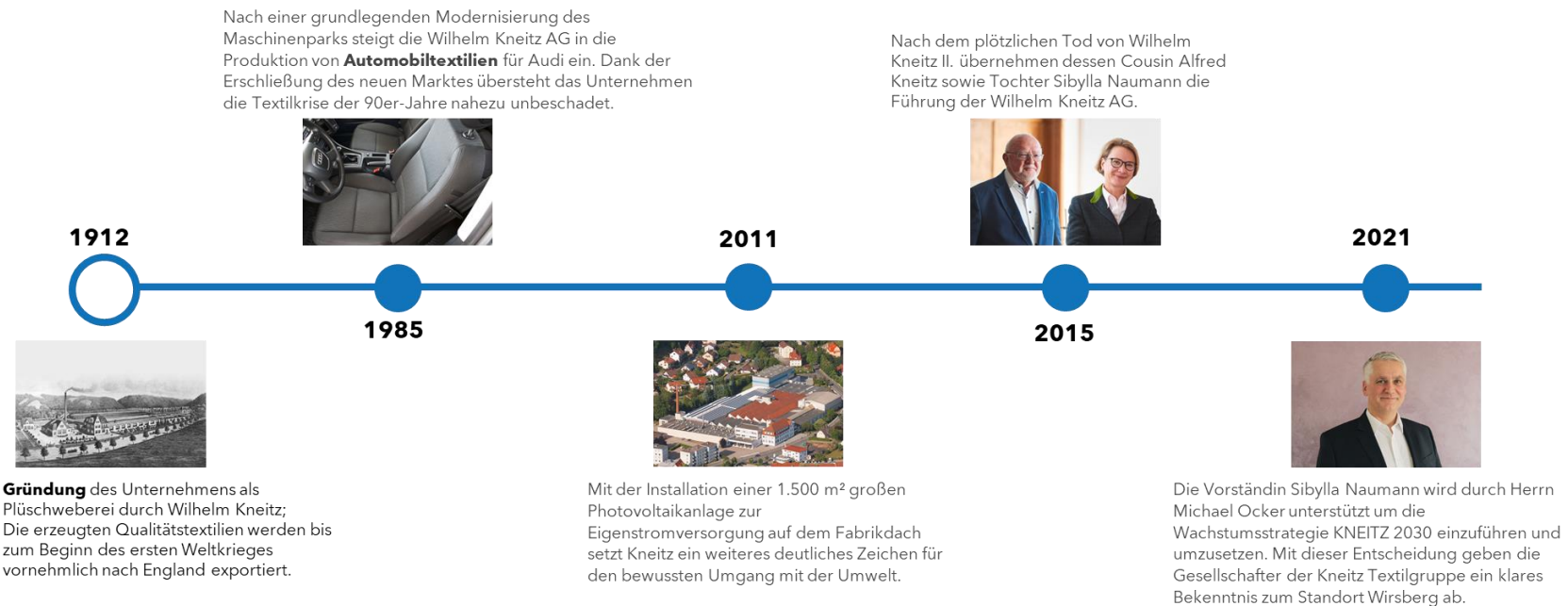


Figure 2: Milestones in the corporate history of Wilhelm Kneitz AG

Responsible corporate governance

Tradition, quality, sustainability and social responsibility characterize our corporate actions and form the basis of our success. Conscious and ethically correct behavior towards employees, colleagues, business partners, society, the environment and towards the next generation are elementary components of the value system. The minimum requirement is compliance with the law. In the same way, every individual is required to behave responsibly, fairly and in accordance with the rules. As a partner of renowned automotive manufacturers, we are also subject to a wide range of legal regulations and the high demands of the automotive industry. It is part of our self-image to comply with existing regulations and to take responsibility for our actions. Environmental protection, climate protection and resource conservation are also clear expectations we have of ourselves and others.



All these and other principles are set out in the Code of Conduct of the German Textile and Fashion Industry Association, to which we are clearly committed and thus live up to our responsibility to all parties. The Code of Conduct is based on the internationally recognized principles for the protection of human and labor rights as expressed in the United Nations Universal Declaration of Human Rights, the ILO Core Labor Standards, the UN Guiding Principles on Business and Human Rights and the OECD

Guidelines for Multinational Enterprises. In addition, the Code is based on relevant international agreements for the protection of the environment. As a company in the textile and fashion industry, we support the goal of enforcing human rights, labor, social and environmental standards in economic value creation processes. By aligning our business activities with these principles of international law, we can make a contribution to this.

The Code of Conduct contains the following principles:

1. Basic understanding

Socially responsible corporate governance is one of the basic and core principles of entrepreneurial activity. In all business decisions, the consequences in economic, social and ecological terms must be taken into account and an appropriate balance of interests must be achieved. The principles of the UN Global Compact are always kept in mind by the companies. Companies contribute voluntarily and within the scope of their individual capabilities to the well-being and sustainable development of global society at the locations where they operate. The same applies to business relationships within the textile chain. Business partners are to be treated fairly. Contracts are to be honored unless there is a fundamental change in the general conditions. The generally applicable ethical values and principles are to be taken into account; this applies in particular to human dignity.

2. Scope of Application

This Code of Conduct applies to all members of the Wilhelm Kneitz AG.

3. Cornerstones of socially responsible corporate governance

- **Compliance with the law**
The company committing itself to the Code of Conduct (hereinafter referred to as "Wilhelm Kneitz AG") complies with the laws and legal regulations of the countries in which it operates. In the case of countries that do not have a satisfactory level of regulations, it carefully examines which corporate practices from Germany should be applied in a supportive manner for responsible corporate governance. Wilhelm Kneitz AG follows legally sound and recognized business practices and fair competition. In particular, it will not engage in collusion or conduct that is contrary to German or European antitrust law or the antitrust law of any other country in which Wilhelm Kneitz AG is active. Wilhelm Kneitz AG rejects corruption and bribery in the sense of the UN Convention. It promotes transparency, acting with integrity and responsible management and control in the

company in an appropriate manner. The interests of Wilhelm Kneitz AG and private interests of employees are to be strictly separated.

- Consumer interests
The Wilhelm Kneitz AG takes the interests of consumers into account in its actions. It ensures that its products are safe and harmless to health for their intended use. Legal limits must be complied with and, if possible, undercut. The interests of consumers are also taken into account in an appropriate manner in information and operational activities.
- Communication
The Wilhelm Kneitz AG communicates the Code of Conduct and its implementation to employees, business partners and other stakeholders, e.g. by announcing it on its own website. It is prepared to engage in a dialogue about the contents of the Code of Conduct. Company secrets and business information from third parties are treated sensitively and confidentially.

4. Human Rights

The Wilhelm Kneitz AG observes and promotes human rights in accordance with the UN Human Rights Charter. Wilhelm Kneitz AG pays particular attention to the following human rights:

- Health and safety
The Wilhelm Kneitz AG is committed to a health-promoting work environment, preserves health and ensures occupational safety in order to prevent accidents and injuries.
- Harassment
The Wilhelm Kneitz AG protects its employees against physical punishment, physical, sexual, mental, or verbal harassment and intimidation or abuse.

- Freedom of Expression
The right to freedom of opinion and expression is protected and guaranteed.
- Protection of privacy

5. Working conditions

Observance of the ILO core labor standards.

The Wilhelm Kneitz AG complies with the eight ILO core labor standards. These are

- the prohibition of child labor in accordance with ILO Conventions No. 138 (Minimum Age) of 1973 and No. 182 (Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor) of 1999
- the prohibition of forced labor in accordance with ILO Conventions No. 29 (Forced Labor) of 1930 and No. 105 (Abolition of Forced Labor) of 1957
- the promotion and, where possible, securing of equal remuneration for men and women for work of equal value in accordance with ILO Convention No. 100 (Equal Remuneration) of 1951
- respecting workers' rights in accordance with ILO Conventions No. 87 (Freedom of Association and Protection of the Right to Organize) of 1948 and No. 98 (Right to Organize and Collective Bargaining) of 1949, insofar as this is legally permissible and possible in the country concerned
- Prohibition of discrimination in accordance with ILO Convention No. 111 (Discrimination in Employment and Occupation) of 1958. The prohibition refers in particular to discrimination against employees on the basis of sex, race, disability, ethnic or cultural origin, religion or belief, or sexual orientation

- Working hours: Unless the respective national regulation specifies a lower maximum working time, the regular standard working time per week shall not exceed 48 hours. Employees shall have at least the equivalent of one day off in each 7-day period. This may be granted in a period of up to 14 days, if the respective national regulation so provides

6. Environmental protection

The Wilhelm Kneitz AG complies with the valid regulations on environmental protection that affect its operations at the site. It acts in an environmentally conscious manner. If the valid regulations do not achieve a level of protection that ensures sustainable business operations, the company will take economically justifiable measures to achieve a satisfactory level of protection. Furthermore, the company handles natural resources responsibly in accordance with the principles of the Rio Declaration. Naturally, our environmental management is certified according to DIN EN ISO 14001:2015.

7. Civil commitment

The Wilhelm Kneitz AG contributes to the social, cultural and economic development of the country and region in which it operates and promotes corresponding voluntary activities by its employees.

8. Implementation and enforcement

Wilhelm Kneitz AG shall make every appropriate and reasonable effort to continuously implement and apply the principles and values described in this Code of Conduct and, if necessary, to remedy any existing deficits as quickly as possible. Contractual partners shall be informed of the essential measures upon request and on condition that this is done reciprocally. It should be made comprehensible to the contractual partner that compliance with the Code of Conduct is fundamentally guaranteed. This does not imply any claim to the

disclosure of trade and business secrets or information relating to competition or other information worthy of protection.

Environmental management

We take our responsibility for nature and the environment into account.

We look at our resource requirements and our energy consumption.

We are actively committed to climate protection - our goal is to operate economically under conditions that are as environmentally and climate friendly as possible.

We record all possible effects of our activities on the environment and take these into account when making decisions and taking measures within the company. This was manifested for the first time in 2017 through certification according to DIN EN ISO 14001:2015. Until today and of course also in the future, we maintain the certification through an annual audit.

Responsibility to society

The United Nations (UN) 2030 Agenda is a global plan to promote sustainable peace and prosperity and protect our planet. Since 2016, countries and organizations have been working to implement this agenda with its 17 Sustainable Development Goals (SDGs). Our aim is to add measurable value and make a clearly identifiable contribution through our business activities.



The first Sustainable Development Goal is to eradicate all forms of poverty, everywhere in the world. The United Nations (UN) Agenda 2030 identifies the eradication of poverty in all its forms and dimensions as the greatest global challenge and an indispensable prerequisite for sustainable development. In Germany, the focus for this goal is on ensuring a minimum subsistence level for a dignified life, as guaranteed by

the constitution. This is achieved through the principle of the welfare state. In addition, relative poverty must be combated, with social inequalities playing a major role. In Germany, single parents and families with more than two children are particularly exposed to a higher risk of poverty. Wilhelm Kneitz AG counteracts these inequalities by providing an adequate income and creates a level playing field for all employees through fair gender-neutral company policies and an open culture of discussion. Specifically, the following points are worth mentioning:

- Wage level significantly above minimum wage
- 37-hour week with overtime compensation
- Company pension plan
- Bonuses and special payments
- Forward-looking working time planning with consideration of the compatibility of family and career



For SDG 2, the focus for Germany is primarily on promoting sustainable agriculture and, beyond that, providing everyone with access to a healthy and balanced diet. Here, it is not so much the lack of food that plays a role, but much more a moderate use of food to avoid disease-causing excess. For Wilhelm Kneitz AG, this means that employees can eat a healthy and balanced diet at their workplace.

Wilhelm Kneitz AG offers the following options:

- Provision of free, purified drinking water, through water dispensers always accessible.
- Break rooms with cooking facilities
- Due to the immediate vicinity of food retailers with a wide range of products, as well as local restaurants, employees can eat a varied, regional and fresh diet at any time.



The focus here is on prevention and education. The Wilhelm Kneitz AG attaches great importance to the well-being and health of its employees. This is achieved by offering a wide range of different sporting activities and preventive measures, which not only improve physical fitness but also strengthen team spirit. The Wilhelm Kneitz AG makes the following offers available to its employees:

- Back therapy training
- 2 x weekly gymnastics under guidance for each department
- Company running group
- Medical officer
- Open discussion culture on workplace stress (including company chaplain)
- Intern integration management



To achieve high-quality education, Germany focuses on equal and high-quality education across the entire spectrum of the educational process. From early childhood, through school education, to vocational and university education, as well as lifelong opportunities for further education. Wilhelm Kneitz

AG makes a concrete contribution to achieving this goal through the following activities:

- Training company in for commercial, industrial and textile-technical professions
- Internships for pupils and students
- Further training to become a master craftsman (IHK training company)
- Internal and external offers for further training



The goal of gender equality is to eliminate all forms of discrimination and violence against women. For Germany, the focus is primarily on equal participation of women in the labor market and the reconciliation of family and career, for both women and men. With Sibylla Naumann as a female member of the Executive Board, the management of Wilhelm Kneitz AG is 50% female. This is a model of male and female equality.

The approach runs through all departments. The Wilhelm Kneitz AG contributes to the achievement of this goal through the following activities:

- Female management, authorized signatory and department heads.
- Pay according to collective agreements for all (irrespective of gender)
- Opportunities for part-time work, for better reconciliation of family and career



Since access to clean drinking water and sanitary facilities is available almost everywhere in Germany, the focus is more on securing these, as well as improving water quality. Efficient use as well as sustainable abstraction of water are also a contribution to achieving this goal. In addition to the operation of sanitary facilities, Wilhelm Kneitz AG also requires water to maintain humidity in production

operations. Concrete activities are:

- A modern efficiently water-saving hall humidification system
- Frequent testing of drinking water quality by means of germ tests



The availability of sufficient energy is the basic prerequisite for a humane society in which people can live in peace and prosperity. On the one hand, the supply of fossil energy has been a major cause of the greenhouse effect, and on the other hand, these are finite. One of the greatest challenges of our time is therefore to convert the energy supply to regenerative resources in the foreseeable future. As a

manufacturing company, Wilhelm Kneitz AG attaches great importance to the topic of "regenerative energy sources" and is a pioneer in the use of renewable energies in production:

- Own photovoltaic systems
- Purchase of green electricity
- Purchase of green gas
- Energy recovery by using the waste heat of the air compressors



The aim is to promote lasting, broad-based and sustainable growth, full and productive employment and decent work for all. This means that economic growth on the one hand must not lead to inhumane working conditions on the other. Wilhelm Kneitz AG contributes to the achievement of this goal through the following activities:

- Compliance with the Code of Conduct
- Corporate Social Responsibility as an integral part of management
- Cooperation with almost exclusively regionally and European-based partners and suppliers, for whom local laws apply and exclude child labor and inhumane employment conditions

- Possibility of anonymous use of an analog or digital complaint box



The focus is on building a resilient infrastructure, promoting broad-based and sustainable industrialization and supporting innovation. For the federal government, this goal includes the incentive to enable companies to develop dynamically and sustainably through structural and industrial policy measures. To this end, cooperation with actors from local authorities, industry, science and civil society is

to be promoted. Wilhelm Kneitz AG works very innovatively and with the latest technology:

- Cooperation with universities and industrial partners
- high priority of Design and development
- Very modern production equipment



Wealth and income are unequally distributed worldwide. In Germany, too, the gap between rich and poor has widened. Relative poverty and inequality within a society harbors great potential for conflict. Therefore, the goal is to enable a fair distribution of assets and income. Wilhelm Kneitz AG counteracts this inequality by implementing the following activities (partial overlap with activities related to SDG 1):

- Collectively agreed pay
- Guarantee of special payments and bonuses
- Non-discriminatory hiring process
- Further qualification offers
- Trusting cooperation with the works council



The goal is to make cities and settlements inclusive, safe, resilient and sustainable. Cities are the engines of national economy, culture and innovation on the one hand, on the other hand, a large part of CO₂ emissions and social problems originate there. Wilhelm Kneitz AG actively participates in social projects, institutions as well as local events. This form of participation contributes to an increase in the

quality of life of the inhabitants of the market town Wirsberg. Examples are the (financial and social) support of the following institutions and projects:

- Kindergarten „Herbert Kneitz“
- Fire department
- Local clubs
- Church
- Community projects
- Good connection to the bike path network, covered bike parking for employee



Sustainable consumption and production methods should be ensured. This means consuming and producing in such a way that the needs of all generations (including future generations) can be met without exceeding the earth's load limit. For Wilhelm Kneitz AG, sustainability plays a major role at all levels. Concrete activities are:

- Certification of the environmental management system according to ISO 14001
- Product made from own recycled production waste
- Research on products made from renewable raw materials (e.g. hemp)
- Sustainable and resource-saving use of working materials through progressive conversion to digital processes
- Publication of a sustainability report



Immediate action must be taken to combat climate change and its impacts. SDG 13 is about protecting the global climate and is one of the biggest challenges of the 21st century. Rapid and ambitious action to mitigate climate-damaging emissions is essential for global sustainable development. Wilhelm Kneitz AG, in order to ensure climate protection (See SDG 7, 12), has already taken numerous activities:

- Calculation and disclosure of the CO₂ footprint (carbon footprints).
- Switch to renewable energy sources
- Climate neutrality of all production. Start: 2022



Aim to conserve and sustainably use oceans, seas and marine resources for sustainable development. Ecologically intact marine ecosystems are of crucial importance for the stability of our climate. Wilhelm Kneitz AG contributes to this goal by:

- Use of water-conserving processes (see also SDG 6)
- No generation and discharge of water polluting substances through business operations
- Recycling of all usable waste at certified disposal companies



Without intact ecosystems, the basis for all life and economic activity is missing. The aim is to protect and restore land ecosystems and promote their sustainable use. Furthermore, forests are to be managed sustainably, desertification combated, soil degradation stopped and the loss of biodiversity put to an end. Wilhelm Kneitz AG contributes to the achievement of the goal with the following activity:

- Large green space around the company building, which is permanently landscaped and maintained



Peace and sustainable development are mutually dependent. Access to justice is to be made possible for all people. In addition, efficient and accountable institutions are to be established. The rule of law forms the basis for functioning democracies and the protection of human rights. Concrete contributions of Wilhelm Kneitz AG are:

- Adherence to the Code of Conduct
- Company chaplain
- Works council
- Owner-managed company with long-term location perspective

17 PARTNER-
SCHAFTEN
ZUR ERREICHUNG
DER ZIELE



Strengthening the means of implementation and giving new life to the global partnership for sustainable development. This objective is primarily concerned with the financing of development programs and cooperation between the countries concerned and transnational institutions. The goal is thus mainly on a political and global level. Wilhelm Kneitz AG contributes to the achievement of the goal:

- Support through memberships in networks that promote national and international cooperation (e.g. Lions Club)
- Membership in associations
- volunteering

PRODUCT RESPONSIBILITY

Value chain

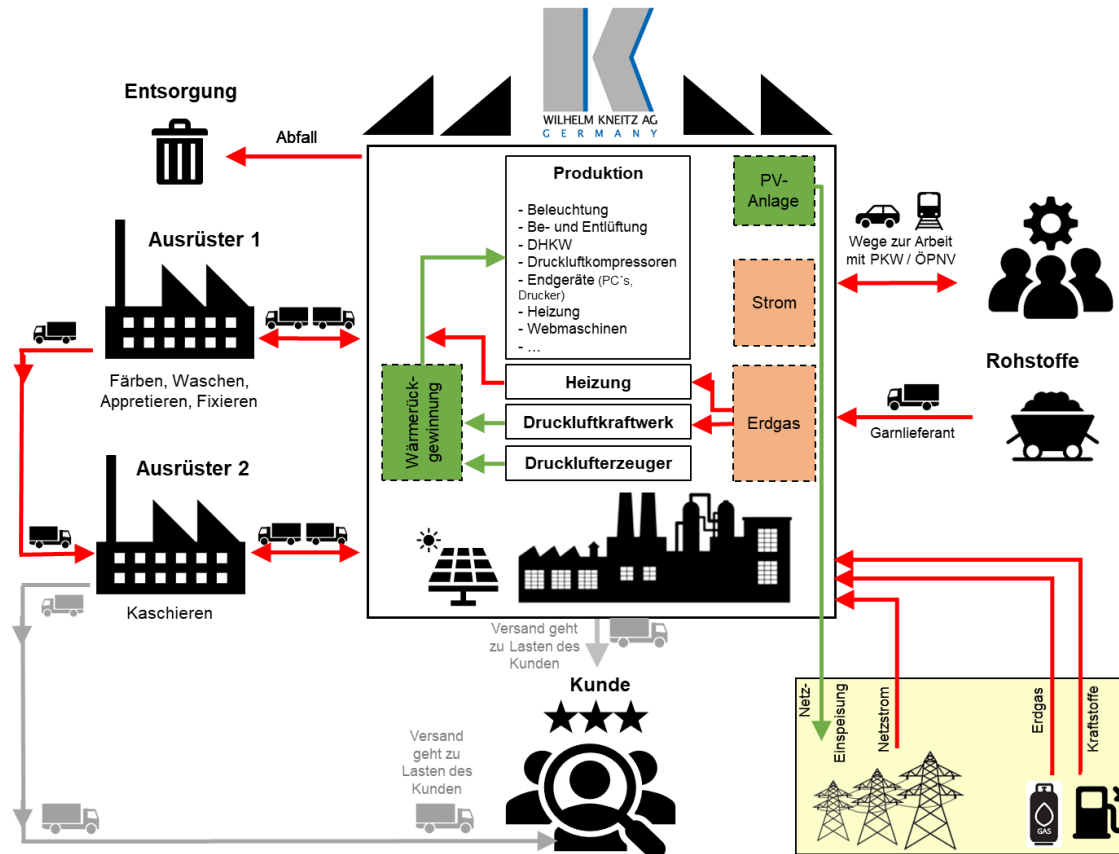
At Wilhelm Kneitz AG, yarn is turned into a finished premium textile. The following figure schematically shows the value chain until the finished textile is delivered to the customer.



The focus is on production, consisting of weaving and warping, right here on site in Wirsberg. Our motto is:

"It is not enough to have the best technology. You also need smart people who know how to use it."

To be able to permanently ensure the highest quality, we rely on two things in the production of our fabrics: the best trained employees with sound specialist knowledge and years of experience and the most modern machines. In our production halls you will find a modern, sophisticated and specialized machinery. This allows us to work quickly, efficiently and flexibly. In this area, too, we never remain at the status quo: we are in permanent exchange with the machine manufacturers and are continuously working on the renewal and improvement of our equipment.



Rev.5 / 21.10.2021 / MS - HCH

Abbildung 3: Schema der Wertschöpfungskette bei der Wilhelm Kneitz AG



In the **warping department**, the yarns are prepared for the weaving process at top speed.

Our state-of-the-art machines are capable of precisely joining up to 11,000 individual yarns into a common warp beam. Thanks to the high speed of 700 meters per minute, the warping process is

completed after only 3-4 hours. Warp batches ranging from the smallest sample metre to kilometer-long large batches are produced just-in-time.

In the **weaving mill**, we rely on state-of-the-art technology with pioneering machinery to always meet the high demands of our customers. Our state-of-the-art machinery consists of the latest generation of dobby and jacquard air-jet weaving machines. These are networked via the CIM/ERP network. This means that complicated patterns or large production batches can be woven easily and very quickly.



Thanks to digitalization and networking of all our production units, our designs are available for production within the shortest possible time. There, our high-speed weaving machines operate at speeds of up to 1,000 wefts per minute with the highest precision and quality.



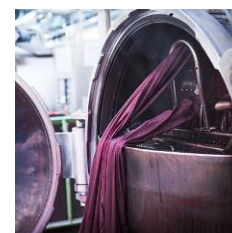
Raw material is the yarn. This is either conventionally produced from crude oil or obtained from recycled PET bottles. Preference is given to yarn suppliers with the greatest possible regionality in order to cause as few emissions as possible during transport. Regionality is a top priority at Wilhelm Kneitz AG and is also reflected in the choice of service providers for the finishing processes. Both finishers are located no more than 50 km away.



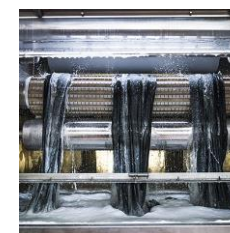
The **finishing** of the textiles is carried out by competent partners from the region. We work together with specialists in strategic partnerships. Their work meets the highest quality standards and gives our textiles the "finishing touch". Whether dyed, coated, laminated, flame-laminated, rolled or die-cut, we provide the optimum finishing and presentation for every customer requirement, precisely and individually.

Thanks to many years of cooperation, we can rely on the high quality of our partners.

Dyeing



Washing and surface functionalization



Flame laminating / laminating



Punching



Logistics



It is not for nothing that renowned automotive manufacturers from all over Europe rely on premium textiles from Kneitz when it comes to the textile interiors of their vehicles.

With our textile know-how, we can match each fabric perfectly to the individual application and equip it with the desired properties. It is a particular concern of ours that our textile materials underline and harmoniously complement the respective vehicle character.

Dialog with our customers and partner companies

Our main customers are the suppliers of seat manufacturers for Audi, BMW, Mini, VW, Seat and Skoda.

We accompany our customers individually with every project from the first meeting to production readiness. Thanks to several of our own sample looms, our designs are not only created on the screen, but as real fabric samples. Our creative solutions are specially adapted to the needs and requirements of each project. From modern to classic or sporty to elegant. We design the ideal fabric pattern for each customer's request. Our development capability does not end with colors and patterns, but also extends to the composition of fabrics and their areas of application. This know-how also enables us to do development work in the field of technical textiles and smart textiles. We maintain an open dialogue with our customers, using all common means of communication.

Premium textiles



Our core business is premium textiles for textile vehicle interiors: Automotive Solutions made by Kneitz - textile interior competence for mobility.

Innovations and sustainable products

Breaking new ground - a head start through innovation

We never stand still; we do not rest on our laurels. On the contrary: we are continuously developing ourselves and our textiles. We create individual designs and new, high-quality fabrics and work to constantly improve and optimize qualities and production processes.

For us, development means the tailor-made design of textile surfaces, the selection of the best possible yarns and fabric settings. In the further process, we coordinate the finishing parameters with our partner companies and coordinate the lamination on the fabric reverse side with special nonwovens and foams, films and spacer fabrics.



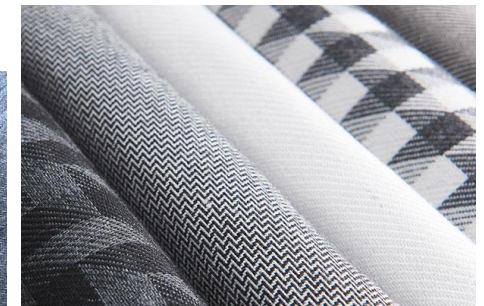
In this process, the design and development department work hand in hand with the in-house testing laboratory, ensuring quality to meet the high demands.

Recyfabrics



Through the targeted collection of production waste and its purely mechanical processing, we succeed in using valuable secondary raw materials in this collection, which are processed into high-quality yarns in a regional cooperation. From this we develop and manufacture fabrics that meet the highest requirements and are suitable for

use in upscale interiors.



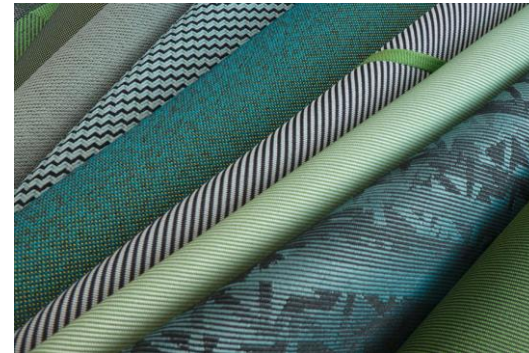
Hemp



In addition, we are investigating renewable raw materials and their suitability for our areas of application or the possibilities of composting for textile materials. In this context, we work closely with renowned research facilities, institutes, yarn manufacturers and other innovative companies.



Sustainability

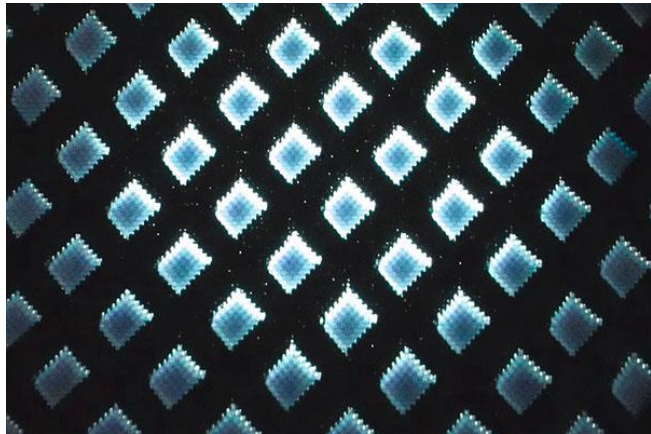


By increasingly using yarns that can be spun from secondary raw materials such as drinking bottles, we are reducing the proportion of petroleum-based raw materials. In addition, we are working on single-variety solutions for upholstery materials, thereby creating the opportunity for reuse and making an important

contribution towards the circular economy.



Translucency



Here we are investigating how we can make surfaces glow with our textile materials and thus further adapt interiors to human needs. In doing so, we are seeking cooperation with processing companies so that we can utilize the know-

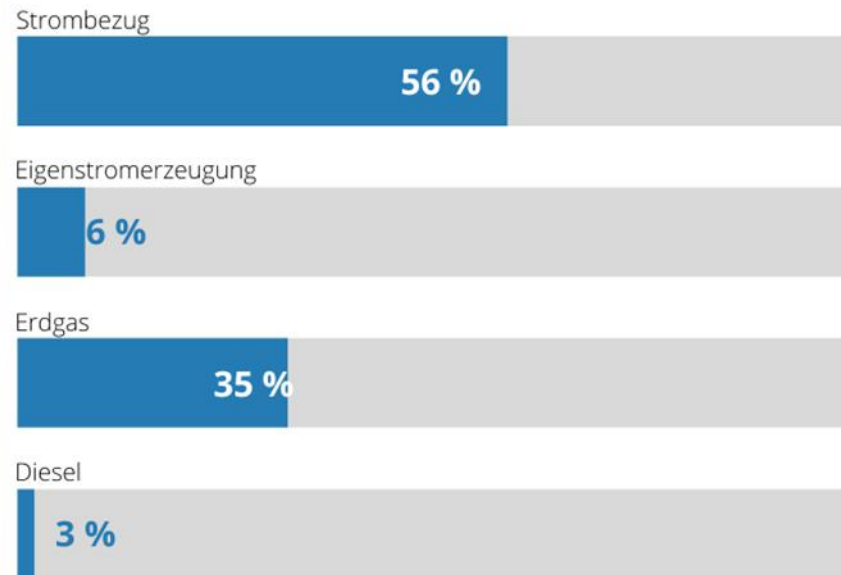
how on as broad a level as possible.

ENVIRONMENT AND ENERGY

Energy use



Energieverteilung 2022



The main energy source of the Wilhelm Kneitz AG is electricity. Since this reporting year, electricity purchases have been switched to 100 % green electricity. Natural gas, which is required both for heating and for generating compressed air in the company's own compressed air cogeneration plant, was also converted to 100 % green gas at the beginning of 2022. In addition, Wilhelm Kneitz AG has had a photovoltaic system for generating its own electricity since 2011. In 2022, 437.9 MWh of electricity could be produced, of which 76 % could be used directly in production. In total, a share of 6% of the total energy demand could be covered in 2022 by means of self-generated electricity.



Eigenstromerzeugung PV-Anlage



Implementations for environmental protection

Our business activities have an impact on the environment. Greenhouse gas emissions, wastewater and waste are generated. Natural resources are becoming increasingly scarce and we strive to use energy, water and materials as efficiently as possible. As a modern industrial company, we are aware of our responsibility to our environment and to future generations and therefore set a good example. Thanks to state-of-the-art technology in all areas, no toxic substances or wastewater requiring treatment are released into the environment during our production.

- With our photovoltaic systems, which were installed in 2011 and expanded in 2016 cover a total area of 1,500 m². We generate up to 10% of our electricity requirements ourselves in an environmentally friendly manner in sunny years.



- 2016 Modernization of the heating system to low-temperature technology with a large heat storage tank. Via heat exchangers, we use the waste heat from all our compressors to heat our buildings. This saves us 30% heating energy and thus also reduces our Carbon footprint.

- In 2018, our compressed air block-type thermal power station for compressed air generation was commissioned - another milestone in saving energy costs and conserving resources. We are one of the first in Germany to use this technology and generate our compressed air around the clock from the primary energy source natural gas. The waste heat generated is stored and used to heat our rooms

Climate protection

Climate change is one of the major challenges of the 21st century. Our aim is to reduce greenhouse gas emissions caused by our business activities as far as possible to protect the climate. We are convinced that climate protection and energy efficiency will pay off in the long term.

In 2020, we calculated our corporate carbon footprint for the first time. We also calculated our corporate footprint for the reporting year, as well as the product-related footprint for our Uni doobby fabric. The theoretical background as well as the calculation and a detailed presentation of results can be found in the next chapter of the report.

Waste and recycling

We use materials as efficiently as possible to keep the inevitably generated waste as low as possible. In addition, it is important to dispose of the waste generated in a sensible manner. In concrete terms, this means that all recyclable materials in the company are separated and recycled as far as possible. The exception is the fraction of oily operating materials and used oil, which are recycled for energy recovery. Corresponding proofs (takeover certificate in the case of collective disposal certificate(s) for hazardous waste) exist (used oil, oily operating materials). All other wastes are not subject to verification (non-hazardous).

Since waste oil and oily operating fluids together account for only 0.5% of the total volume of waste, this results in a **recycling rate of 99.5%**.

Since 2018, we have been able to reduce our total waste volume by 32%.

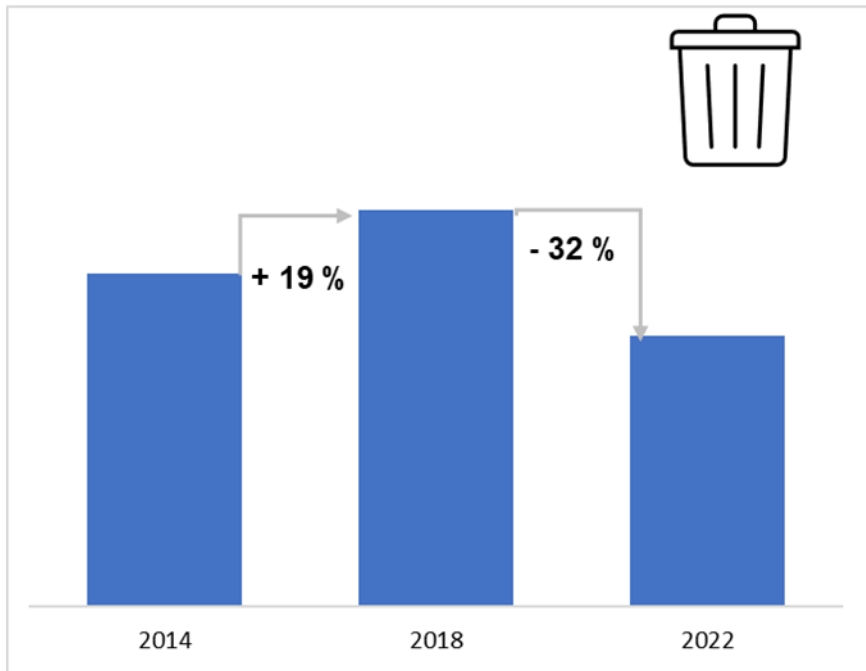


Figure 4: Waste generation in recent years

Water management

Efficient use of water as a resource plays a major role in our operational processes. Water is not required as a direct resource for the production processes. To ensure a consistent quality of the textiles, hall humidification is necessary to keep the air humidity constant throughout the year. By improving the technology and installing a new humidification system, water consumption has been reduced by 77 % since 2014. The **evaporation rate** in the reporting year is **57 %**.

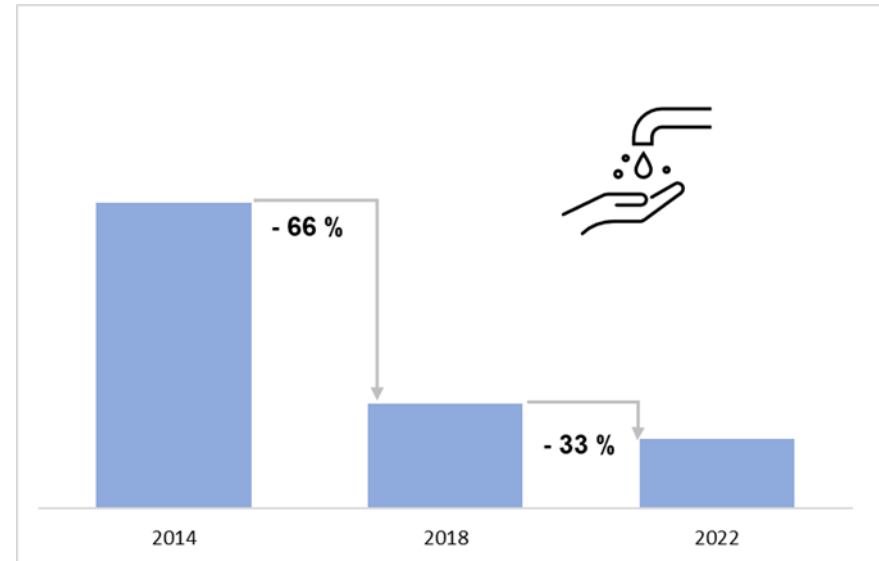


Figure 5: Water consumption since 2014



OUR FOOTPRINT

Corporate Carbon Footprint

With the creation and publication of our Corporate Carbon Footprint, the greenhouse gas emissions of the Wilhelm Kneitz AG are measurable and a continuous improvement process, which brings about a responsible use of energy resources, is initiated. The knowledge gained in this process will be used to understand Wilhelm Kneitz AG's impact on the global climate, to identify further potential for savings, and to demonstrate to customers, employees, and other partners a responsible role in our commitment to environmental sustainability.

In doing so, the Wilhelm Kneitz AG acts according to the principle: avoid before substitute before compensating. The goal of Wilhelm Kneitz AG was to achieve a completely independent climate-neutral status for its own company activities in the next few years, which was achieved in 2022. Measures have already been taken to achieve this, such as the installation of a PV system on the company roof to generate electricity and the connection of a compressed air cogeneration plant to provide compressed air from natural gas with integrated heat recovery.

Methodology

With the aim of achieving a high degree of comparability and transparency in the results obtained, the calculation of the company's corporate carbon footprint was carried out in accordance with the methodological requirements of the "Greenhouse Gas Protocol Corporate Accounting and Reporting Standard" (GHG Protocol). The results of the greenhouse gas balance also meet the requirements of the DIN EN ISO 14064 standard for determining greenhouse gases at the organizational level, which was developed based on the GHG approach. The GHG Protocol of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) is the most widely used international standard for the collection and presentation of operational greenhouse gas emissions.

The relevant indicator is the carbon footprint, which is expressed in CO₂ equivalents (unit: t CO₂ eq.). This indicator shows the amount of greenhouse gas emissions (GHG emissions) that a company emits in relation to a fiscal year. In the present analysis, the greenhouse gas emissions resulting from the activities of Wilhelm Kneitz AG are accounted for.

Within the organizational boundaries, emissions of Scopes 1, 2 and 3 are to be recorded. The aim of the balance is a complete consideration of all emission sources, as far as these can be determined according to the principles of relevance, completeness, consistency, transparency and accuracy. According to the requirements of the GHG Protocol, emissions are subdivided as follows:

Scope 1: All emissions that occur directly within the company. That is, those emissions from sources that the company either owns or directly controls.

Scope 2: All indirect emissions resulting from the company's energy supply. In other words, emissions from purchased electricity and thermal energy.

Scope 3: All other emissions that result from the company's activities but are owned or controlled by a third party.

Calculation and results

The greenhouse gas emissions that occur directly at the Wilhelm Kneitz AG are the company's direct sphere of influence result from the combustion of natural gas and fuel (Scope 1) and from greenhouse gas emissions from purchased energy (Scope 2). As already mentioned, Wilhelm Kneitz AG produces climate-neutrally, even climate-positively through the crediting of the sale of self-generated PV electricity. The greenhouse gas emissions resulting from Scope 1 and 2 amount to a total of **- 8 t CO₂ eq.** (2020: 982, 2021: 1,2232 t CO₂ eq.).

The following diagram shows that the greenhouse gas emissions resulting from the production have already been reduced since 2014 through a continuous increase in energy efficiency. It should be noted that the decrease in GHG emissions between 2019 and 2020 is also because of the Corona pandemic. Nevertheless, a significant and steady decrease in GHG emissions has also been observed in previous years.

This is due to a steady increase in electricity production from the company's own PV system and thus a lower need for purchased electricity. At the same time, the share of Scope 1 emissions is decreasing, as the installation of various heat recovery systems has saved a considerable amount of natural gas and thus significantly reduced GHG emissions (a more detailed analysis of this can be found in the following chapters).

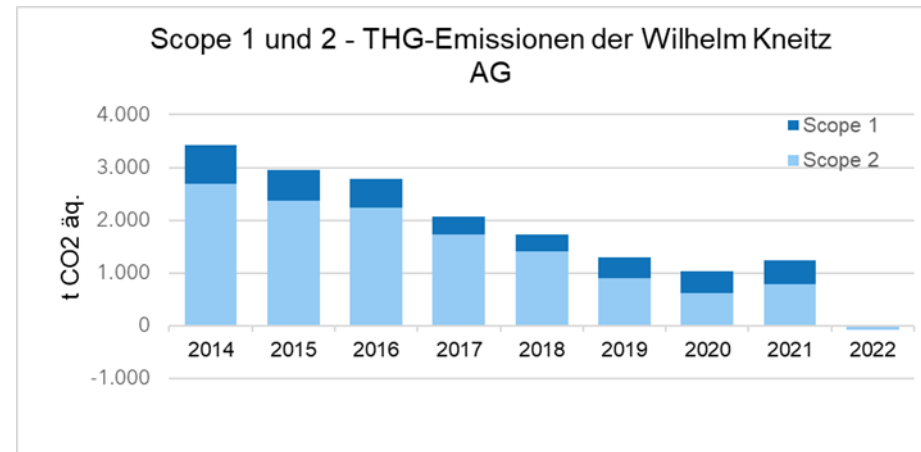


Figure 6: Greenhouse gas emissions resulting from Scope 1 and Scope 2 (marked-based) in t CO₂ eq. Greenhouse gas emissions are calculated according to emission factors of the German Federal Environment Agency. Scope 1 considers the combustion of natural gas as well as the combustion of fuel from the company's own vehicle fleet. Scope 2 includes purchased electricity with supplier-specific ("marked based") emission factors.

Scope 1

Scope 1 accounts for greenhouse gas emissions that are generated directly within the company. This includes the combustion of natural gas for heating as well as the combustion of fuel resulting from the operation of the company's internal delivery vehicles. The company's own vehicle fleet includes a truck and a bus that run on diesel. Furthermore, the Wilhelm Kneitz AG has been operating its own compressed air cogeneration plant (DHKW) since 2018, which enables the provision of compressed air using natural gas. Since only eco-gas was purchased in the reporting year, and this is considered climate-neutral, only the vehicle fleet is included in the calculation.

In total, the scope 1 GHG emissions amount **27 t CO₂ eq.** for the year 2022.

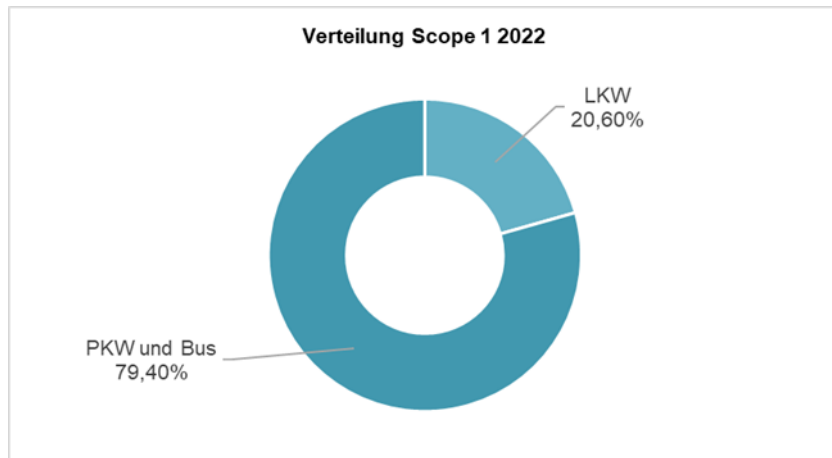


Figure 7: Relative distribution of GHG emissions arising in Scope 1 for the year 2022.

Figure 8 shows the development of greenhouse gas emissions over the last seven years. A decrease in emissions of 96 % can be seen. The increase in natural gas consumption since 2018 is due to the installation of the natural gas-fired compressed-air cogeneration plant. The increase in greenhouse gas emissions resulting from the amount of natural gas used for heating in 2020 and 2021 is due to a lower production volume (caused by the pandemic) and thus less usable waste heat.

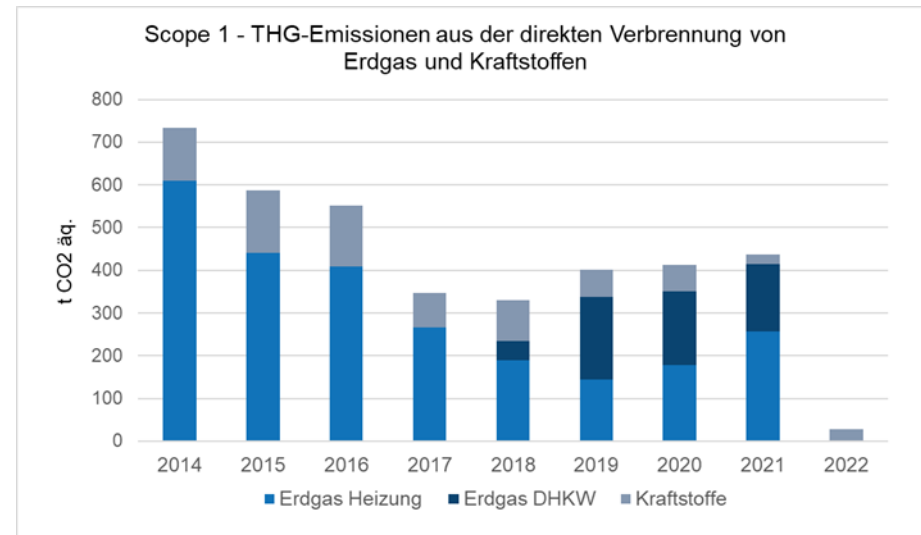


Figure 8: Greenhouse gas emissions from Scope 1 in t CO₂ eq. Greenhouse gas emissions are calculated using emission factors from the German Federal Environment Agency. Scope 1 considers the combustion of natural gas for heating and for the DHKW (pressurized combined heat and power plant for the generation of compressed air) as well as the combustion of fuel for the company's own vehicle fleet.

Data source Emission factors:

Natural gas: Federal Environment Agency (2019): Emissions balance of renewable energy sources.

Fuels: Diesel, GEMIS database, version 4.94

Scope 2

Scope 2 includes greenhouse gas emissions from purchased energy. The net energy purchase was taken into account here (net purchase of electricity minus the sale of the PV electricity fed into the grid). Since Wilhelm Kneitz AG purchases green electricity and this does not cause any greenhouse gas emissions, **35 t CO₂ eq.** could be avoided and credited in 2022 by feeding the surplus PV electricity into the grid.

The "marked based" approach was chosen for the calculation. This means that the emission factor of the respective electricity provider is used to calculate the greenhouse gas emissions. This emission factor can be taken from the electricity supplier's electricity label.

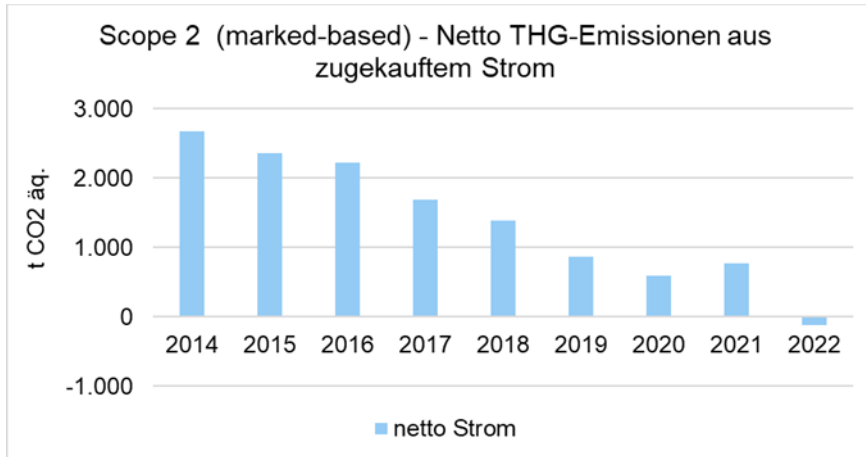


Figure 9: Greenhouse gas emissions from Scope 2 (marked-based) in t CO₂ eq. This includes the purchased electricity with supplier-specific ("marked-based") emission factors, minus the credit of GHG emissions that result from the grid feed-in of the additional PV electricity.

Scope 3

Scope 3 includes all other indirect greenhouse gas emissions that occur in the company's value chain. For Scope 3 consideration, upstream GHG emissions are considered. According to the GHG Protocol, these include the following categories:

- 3.1 Purchased goods & services (yarn, finishers 1 and 2).
- 3.2 Fixed assets
- 3.3 Fuel & energy related emissions (upstream from scope 1)
- 3.4 Transportation and distribution (upstream)

- 3.5 Waste
- 3.6 Business travel
- 3.7 Employee commuting
- 3.8 Lessees in the upstream business chain

The scope of the present carbon footprint calculation is set up to the goods issue ("cradle to gate"). Downstream scope 3 emissions are not considered, as Wilhelm Kneitz AG only represents a part of the supply chain and the further processing of the materials is determined by the customer.

In total, the greenhouse gas emissions from Scope 3 amount to **11.636 t CO₂ eq.**

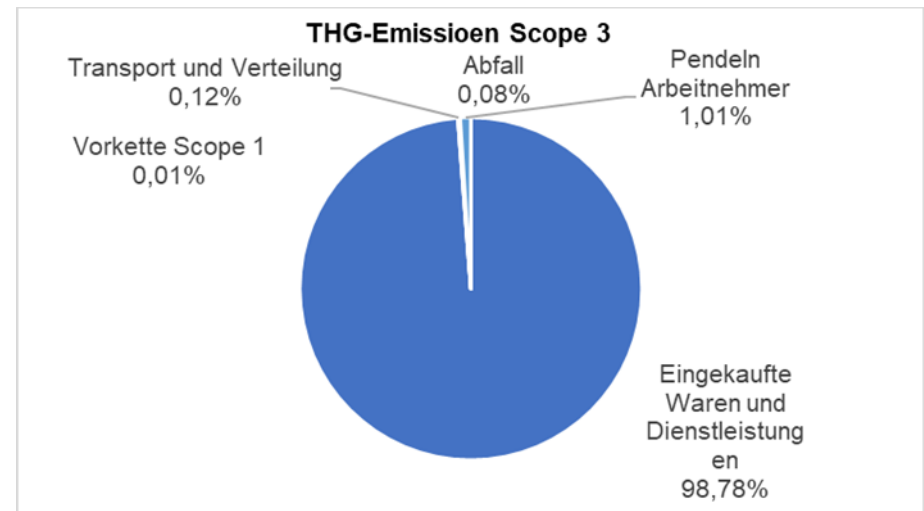


Figure 10: Distribution of GHG emissions according to the categories from Scope 3

The categories belonging to Scope 3 are explained in more detail below. The categories marked with an * have not yet been fully covered.

Category 3.1*: Purchased goods and services

The first category (Scope 3.1) represents a focal point of the corporate greenhouse gas balance. It captures the GHG emissions generated in the supply chain from the production of purchased goods and services. This includes the production or raw material extraction and further processing, as well as all transports to the suppliers.

Wilhelm Kneitz AG purchases yarn as well as services for finishing the fabrics. The emission factor to produce the yarn, as well as the lamination of the textiles, was issued directly by the manufacturers. It should be noted here that only the process carried out in each case was accounted for. For the finishing of the fabrics, an estimate was made for a service provider as an example. In total, there are **11.494 t CO₂ eq.** in category 3.1.



Abbildung 11: GHG emissions of purchased goods and services

Category 3.2*: Capital goods

Emissions that occur during the production of capital goods. These goods are for example

- machinery
- Truck fleet

Category 3.3: Fuel and energy-related emissions (upstream chain from Scope 1).

Category 3.3 includes the extraction, production, and transportation of natural gas as an energy source and fuels, as well as transmission losses during transportation and distribution. In total, category 3.3 accounts **1,13 t CO₂ eq.** The values were calculated based on indirect emission factors from the German Federal Environment Agency.

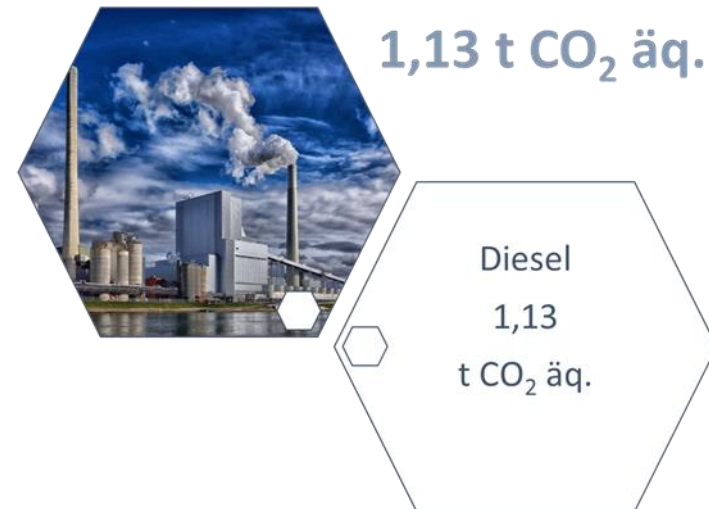


Figure 12: GHG emissions of fuel- and energy-related emissions

Category 3.4*: Transportation and distribution (upstream)

Category 3.4 comprises the transport and distribution of purchased goods between suppliers and the company itself. This also includes all transport and distribution services purchased by the company (incoming and outgoing). Wilhelm Kneitz AG pays close attention to the proximity of the service

providers, as this avoids unnecessarily long transport distances between the service providers. Yarn delivery has already been considered and included in the emission factor for yarn production. In total, the transport of **15 t CO₂ eq.** accounts for only 0.12 % of the scope 3 emissions.

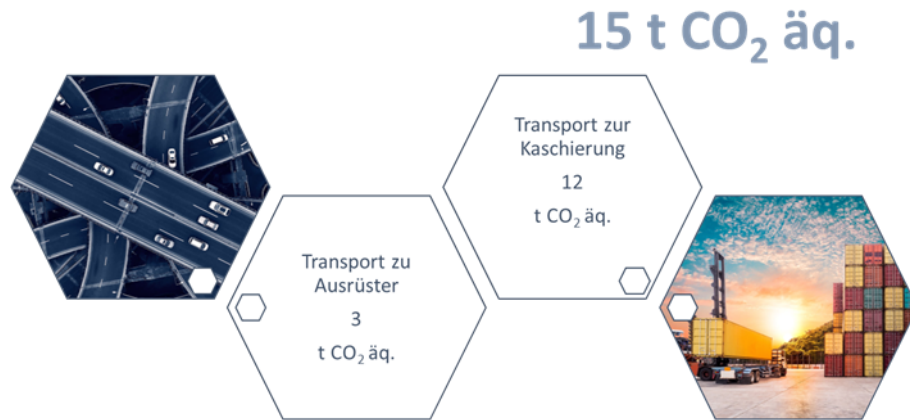


Figure 13: GHG emissions from transport of purchased goods and distribution between finishing plants.

Category 3.5: Waste

Category 3.5 includes treatment and disposal of waste resulting from own operations and downstream treatment of wastewater. Municipal waste and textile waste, which is also recycled as residual waste, were accounted for. All other waste generated in 2022 was recycled and returned to a value chain in some form. For the waste, there are **8,6 t CO₂ eq.** GHG emissions. For the wastewater post-treatment, **0,3 t CO₂ eq.**

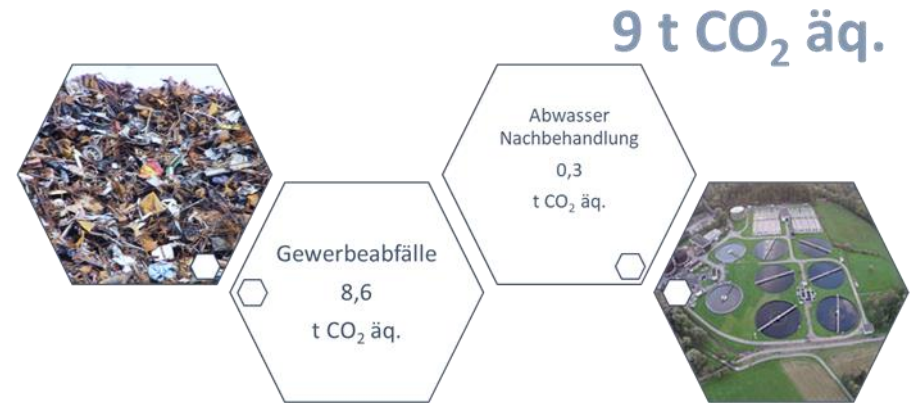


Figure 14: GHG emissions from waste treatment

Category 3.6*: Business travel

In category 3.6, business travel by employees in means of transport not belonging to the company is recorded. These can be, for example, the following means of transportation:

- Cab rides
- Flights with airlines
- Trips with public transport

Category 3.7: Employee commuting

Category 3.7 captures employee commuting between home and work in vehicles not operated by the company. For the calculation, the underlying number of kilometers was roughly estimated, since most of the workforce travels approximately 12 km one-way. Assumption: all 120 employees drive a total of 24 km on working days, half diesel, half gasoline. The employees' commute causes **117 t CO₂ eq.**

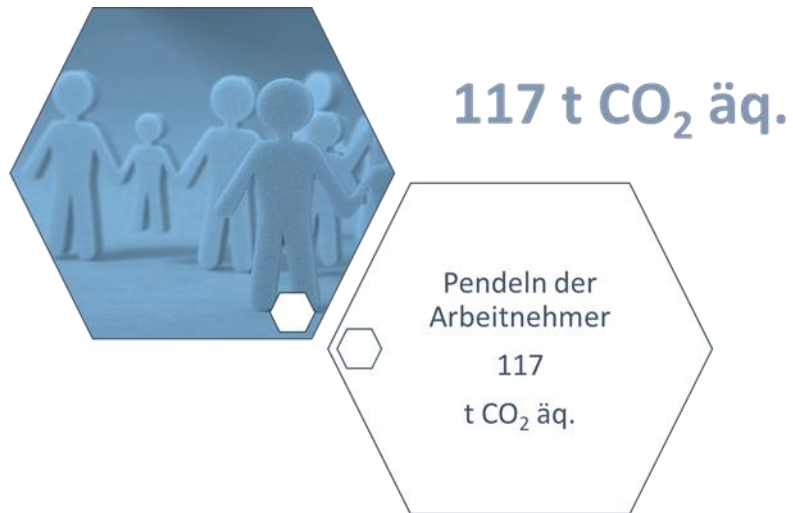


Figure 15: GHG emissions from employee commuting.

Category 3.8*: Leased assets in the upstream value chain.

Category 3.8 includes the operation of leased buildings, machinery, or vehicles and the energy consumption (direct and indirect) of these leased assets.

Conclusion

Wilhelm Kneitz AG leaves a Carbon footprint of **11.628,66 t CO₂ eq.** in 2022, including Scope 3 emissions. This corresponds to the annual footprint of 1.041 inhabitants in Germany and 1.162.783 trees would be needed to bind this annual greenhouse gas emission once.



Figure 16: Carbon Footprint of Wilhelm Kneitz AG in the year 2022.

In Scope 1 and Scope 2, Wilhelm Kneitz AG has already been able to reduce greenhouse gases by 100% through targeted implicit measures and the purchase of green electricity and green gas. Scope 3 emissions are inevitably purchased in the supply chain, but are not directly caused by the activities of Wilhelm Kneitz AG.

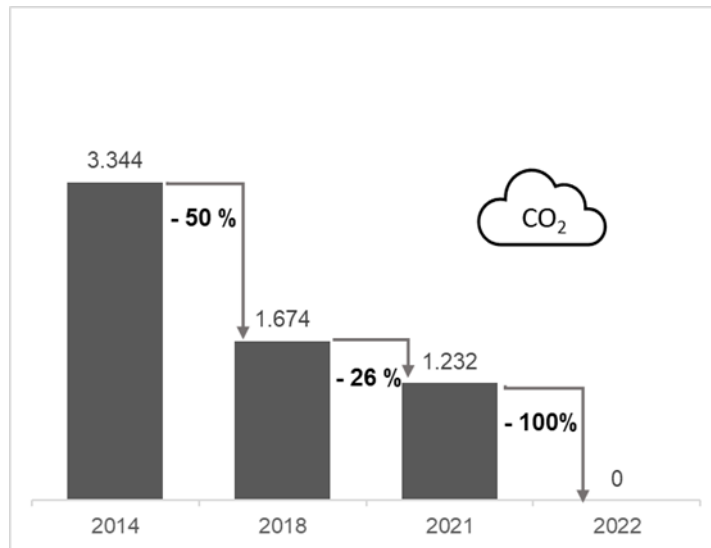


Figure 17: Reduction of greenhouse gas emissions (Scope 1 and 2) since 2014.

The largest share of the footprint is attributable to the purchase of goods and services, over which Wilhelm Kneitz AG has no direct influence. By choosing regional service providers, the emissions for the transport routes between the outsourced transport steps can be kept at a very low level and there are no unnecessarily long transport routes. The waste is recycled as far as possible, and thus partially returned to the value chain.

Table 1: Emission sources of Wilhelm Kneitz AG

| Emissionsquelle | | THG-Emissionen [t CO ₂ äq.] | Anteil [%] |
|------------------------------|--|--|------------|
| Scope 1 | Erdgas | 0,0 | 0,00 |
| | Kraftstoff | 27,0 | 0,23 |
| <i>Summe Scope 1</i> | | 27,0 | 0,23 |
| Scope 2 | Strom | 0,0 | 0,00 |
| | Gutschrift | -35,0 | -0,30 |
| <i>Summe Scope 2 (netto)</i> | | -35 | -0,30 |
| <i>Summe Scope 1 und 2</i> | | -8 | -0,07 |
| Scope 3 | Eingekaufte Waren und Dienstleistungen | 11.494,0 | 98,85 |
| | Kapitalgüter* | 0,0 | 0,00 |
| | Vorkette Scope 1 | 1,1 | 0,01 |
| | Transport und Verteilung | 14,3 | 0,12 |
| | Abfall | 8,9 | 0,08 |
| | Geschäftsreisen* | 0,0 | 0,00 |
| | Pendeln Arbeitnehmer | 117 | 1,01 |
| | Leasinggegenstände* | 0,0 | 0,00 |
| <i>Summe Scope 3</i> | | 11.635,83 | 100,07 |
| Gesamt | | 11.628 | 100,00 |

Climate neutrality



To become a climate neutral production the greenhouse gas emissions resulting from Scope 1 and Scope 2 must be avoided and compensated. Climate neutrality means that there is a balance between the emission of greenhouse gases and their uptake from the atmosphere in so-called sinks (e.g. forests and moors) [according to Article 4 of the Paris Agreement]. For Wilhelm Kneitz AG, this means that the greenhouse gas emissions that occur in Wirsberg because of the production are compensated so that the production is climate neutral.

By switching to climate-neutral green electricity and green gas in the year 2022, the energy sources electricity and natural gas no longer generate greenhouse gas emissions. Only the emissions resulting from the combustion of fuel (Scope 1) must be offset. In 2021, this amounted to a total of 27 t CO₂ eq.

By selling the surplus electricity produced by the own PV system, a total of 35 t CO₂ eq. are credited. (marked based approach, based on the emission values of the current electricity supplier). I.e. this credit fully compensates the emissions resulting from the fuel and even more. Therefore, Wilhelm Kneitz AG is even in the climate positive range with **8 t CO₂ eq.**

Product Carbon Footprint



This chapter explains the basics necessary for understanding the calculation of a Product Carbon Footprint.

Life cycle assessment of a product

The product carbon footprint is the CO₂ balance of a product. The carbon footprint identifies carbon dioxide emissions caused by direct and indirect activities along the entire life cycle of a product.

The product life cycle starts with raw material extraction and raw material extraction from the environment, through manufacturing, processing, use, (multiple) recycling, disposal of waste during each phase, to disposal of the product at the end of its life. The product life cycle analysis includes the environmental impact of the above processes. Likewise, one must consider not only the removals from the environment, but also the releases to the environment, such as emissions of any kind.

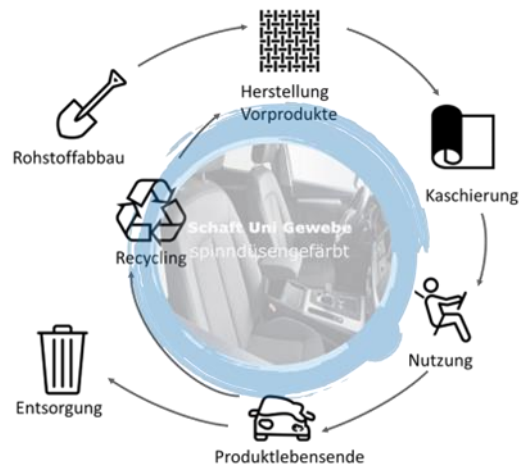


Figure 18: Product life cycle using the example of a car seat cover.

In addition to CO₂, the following other climate-damaging greenhouse gases are also accounted for:

- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorinated hydrocarbons (PFCs)
- Sulfur hexafluoride (SF₆)
- Nitrogen trifluoride (NF₃)

The climate impact of the various greenhouse gases is expressed in CO₂ equivalents, as the gases have different global warming potentials. The Product Carbon Footprint helps to identify and analyze the product's impact on the climate and to reduce it with the right measures. By mapping all life cycle phases, climate-relevant hotspots of a product system can be identified.

System boundaries and functional unit

The system or consideration framework (i.e., system boundaries) includes all operations and processes that are causal to the demand for that product; these are all activities for its production, use, and disposal, or recycling. The consideration of the entire life cycle is referred to as a "cradle-to-grave" analysis, i.e. from the cradle to the grave. If the product life cycle is only analyzed up to the point at which the product leaves the company's own production facilities, this is referred to as a "cradle-to-gate" product balance, i.e. an analysis of all manufacturing steps up to the point at which the product leaves the company's own factory gates. For the life cycle analysis considered here, a cradle-to-gate view is taken, which includes the following process stages:

1. yarn production
2. warping and weaving
3. finishing
4. lamination

Emission sources considered for each process stage include.

- o Material procurement & pre-processing:
 - Raw materials used and auxiliary materials, if applicable
 - Transport of raw materials from supplier to production site
- o Production
 - Energy consumption during production
- o Disposal
 - Disposal of production waste

The functional unit is the reference variable to which the total environmental impacts under consideration relate. This must be defined in advance and all input and output variables to be determined must be related to it. For the balance described below, the functional unit was defined as one linear meter of textile with a width of 1.8 meters.

Results

The following comparative CO₂ balance is intended to show the climate impact of three different manufacturing processes for textiles used as seat cover fabrics in automobiles. The fabric produced is a doobby uni fabric made from spun-dyed yarn.

Several manufacturing steps are required before a polyester fabric ready for use as a seat cover is produced from the raw material crude oil. In the illustration of the life cycle phases of an automotive seat cover, the stations of the life cycle of a seat cover are roughly shown (Figure 18). For comparative purposes, only the manufacturing process will be analyzed. The manufacturing process, the use phase and the disposal or recycling process are not included in this study.

The focus of the analysis is on the different processes for laminating the polyester fabric.

The following manufacturing processes are accounted for:

- o Polyester fabric with PUR foam as comfort layer; lamination is carried out using the flame lamination process → **Variant 1**

- o Polyester fabric with a multiknit; lamination is carried out using the flame lamination process (PUR foam only acts as an adhesive between the PE fabric and the multiknit) → **Variant 2**

- o Polyester fabric with multiknit; lamination is carried out in the process of engraving roll lamination (the bonding is carried out with PE granulate, so that a pure product is created) → **Variant 3**

Process steps

The following figure shows the process steps that are analyzed in more detail regarding their CO₂ footprint.



Figure 19: Process steps from raw material to textile

Process step 1 - Yarn production

The yarn is purchased from a spinning mill in Europe. Depending on customer requirements, this can either be produced from a mix of recycled PET bottles and the company's own production waste, or conventionally from petroleum (so-called virgin polyester). The yarn manufacturer has drawn up a carbon footprint for both yarn variants, consisting of upstream (the raw material mining and procurement), core (the actual spinning process) and downstream (the transport to the customer).

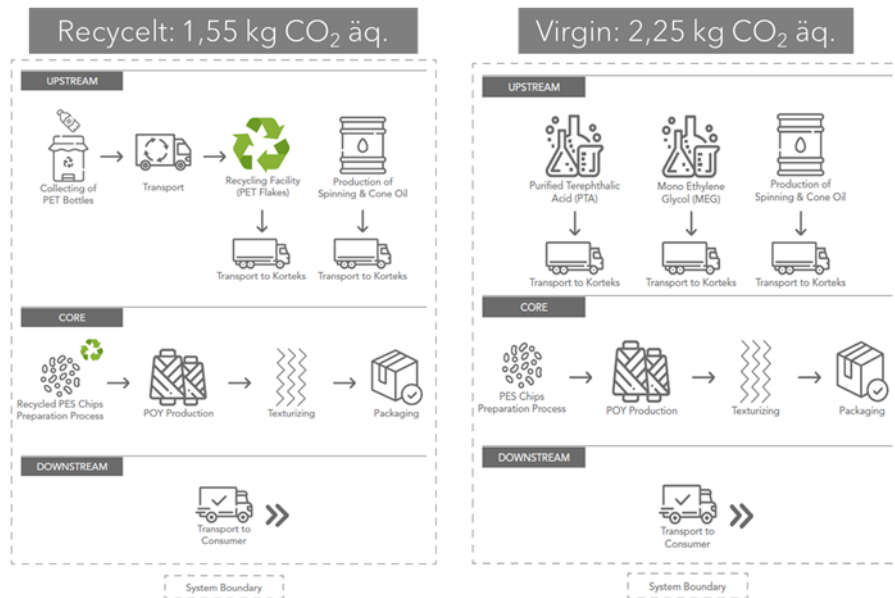


Figure 20: CO₂ balance of yarn production.

The yarn made from recycled material has (related to the functional unit of one linear meter of textile) a footprint of **1,55 kg CO₂ eq.**

The yarn made from virgin PET leaves a footprint of **2,25 kg CO₂ eq.**

Process step 2 - Warping and weaving

Wilhelm Kneitz AG's production is climate neutral. The woven textile is created from the yarn. The electricity required for the warping and weaving process steps is generated from the company's own photovoltaic system and supplemented with purchased green electricity. Nevertheless, a minimal amount (1% of total emissions) of greenhouse gas is produced at Wilhelm Kneitz AG due to the disposal of production waste and packaging waste,

wastewater aftertreatment, and the very low use of a textile auxiliary in the warping process.

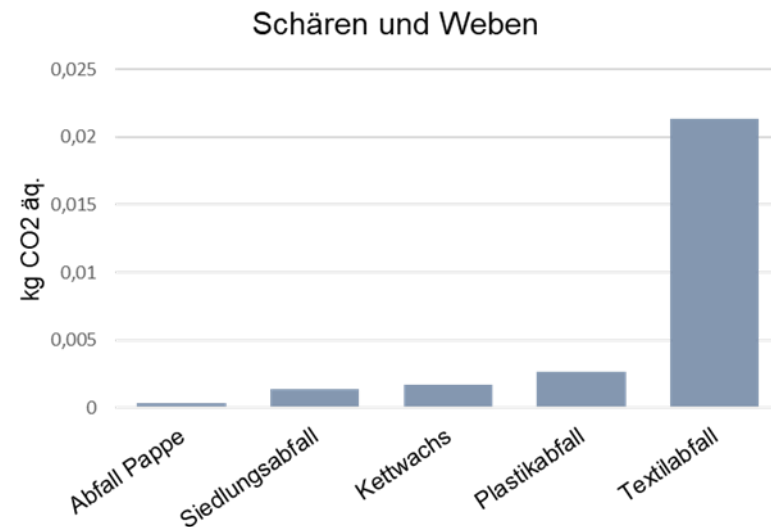


Figure 21: Hot spot analysis of the warping and weaving processes at Wilhelm Kneitz AG.

In total, the warping and weaving processes at Wilhelm Kneitz AG account for **0,027 kg CO₂ eq.**

Process step 3 - Equipment

The finishing process is carried out by a service provider. Here, too, Wilhelm Kneitz AG pays attention to short transport distances and cooperates with a company only 15 km away. The textile is washed and dried. The two process steps (washing and drying) are very energy-intensive because they are carried out at high temperatures. A total of **0,39 kg CO₂ eq.** is produced for finishing the textile.

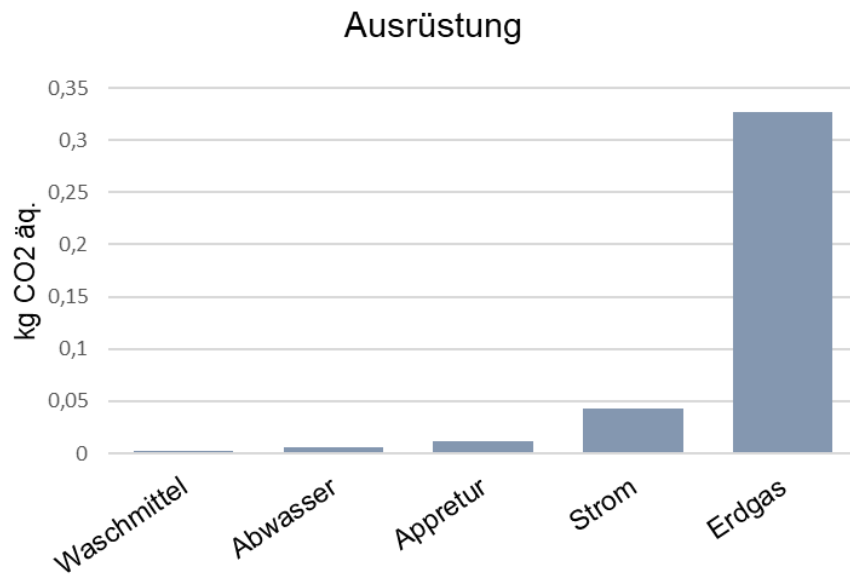


Figure 22: Hot-spot analysis of a finishing operation.

Process step 4 - Lamination

Now that the woven textile has been prepared by the finishing process, it is combined with another material in the lamination process step. Three different bonding options will be considered here.

Variant 1

Flame lamination: A bond is created by "flaming" a polyurethane foam. The foam melts in the process and bonds the upper fabric (the woven textile) to a lower fabric. Depending on the requirements, the height of the foam can vary. If it is melted completely, it acts only as an adhesive between the two textiles. In variant 1, however, the foam height is selected so that a foam layer, the so-called comfort layer, remains between the two textile layers. A knitted fabric made of polyester yarn is used as the bottom fabric.

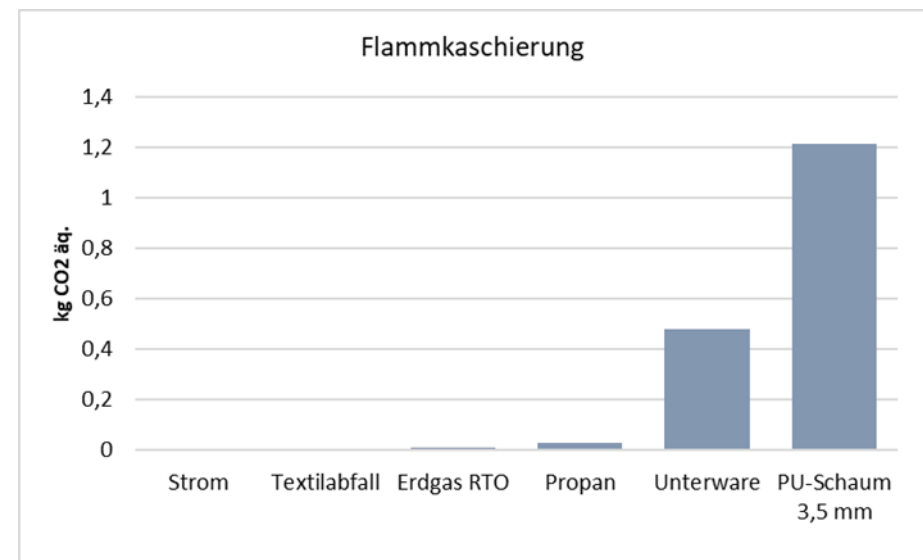


Figure 23: Hot spot analysis variant 1: flame lamination with comfort layer.

A total of 1,75 kg CO₂ eq. is produced for lamination variant 1.

Variant 2

Flame lamination: In variant 2, the polyurethane foam acts only as an adhesive between the textile face fabric and a multiknit as an undergarment. The multiknit consists of PET fibers (virgin and recycled) and is produced using the thermobonding process.

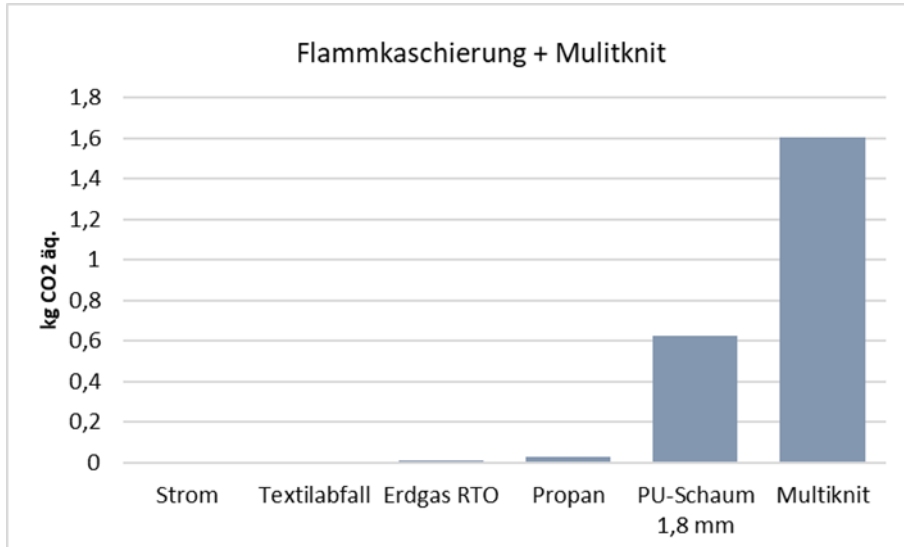


Figure 24: Hot spot analysis variant 2: flame lamination with Multiknit

For lamination variant 2, a total of 2,27 kg CO₂ eq. is produced.

Variant 3

Engraved roll lamination: The textile layers (fabric + Multiknit) are joined by applying adhesive dots using an engraved roll. For variant 3, the aim is to produce a laminate that is as pure as possible, so a polyester-based granulate is used as the adhesive component.

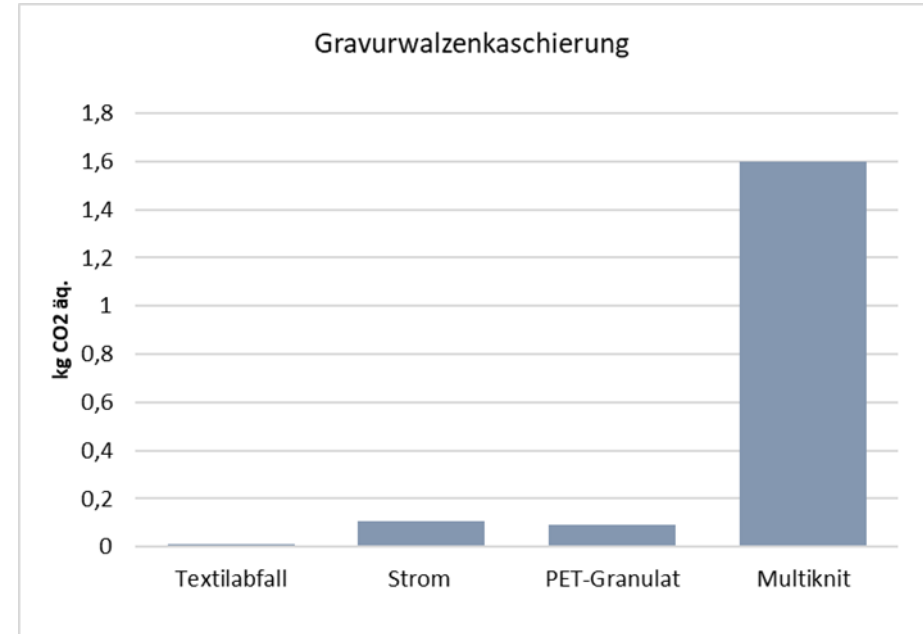


Figure 25: Hot spot analysis variant 3: engraving roll lamination with PET-based granules.

For lamination variant 3, a total of 1,81 kg CO₂ eq. is produced.

Comparison of the laminating variants

A direct comparison of the three laminating processes shows the following picture:

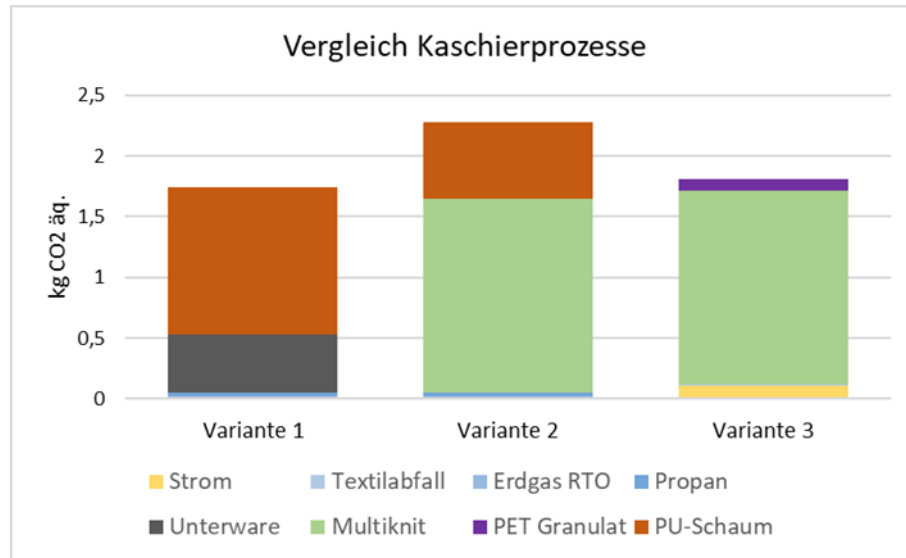


Figure 26: Comparison of the laminating processes.

Variant 1 and 3 leave a smaller carbon footprint than variant 2, with variant 1 performing slightly better than variant 3. This means that the lamination method of flame lamination with polyurethane foam as the comfort layer leaves the smallest ecological footprint.

Comparison

Since the manufacturing processes for automotive seat covers differ only in the last step, lamination, the result has already become clear in the previous chapter.

The following diagrams show all four process steps of the respective variants. A distinction is also made between yarn made from virgin PET and yarn made from recycled PET.

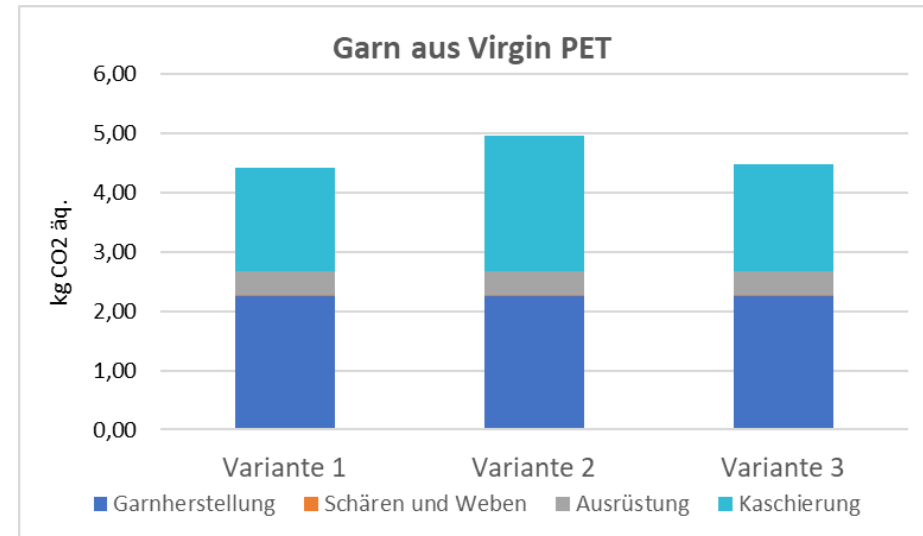


Figure 27: Comparison of the total GHG emissions with virgin PET yarn.

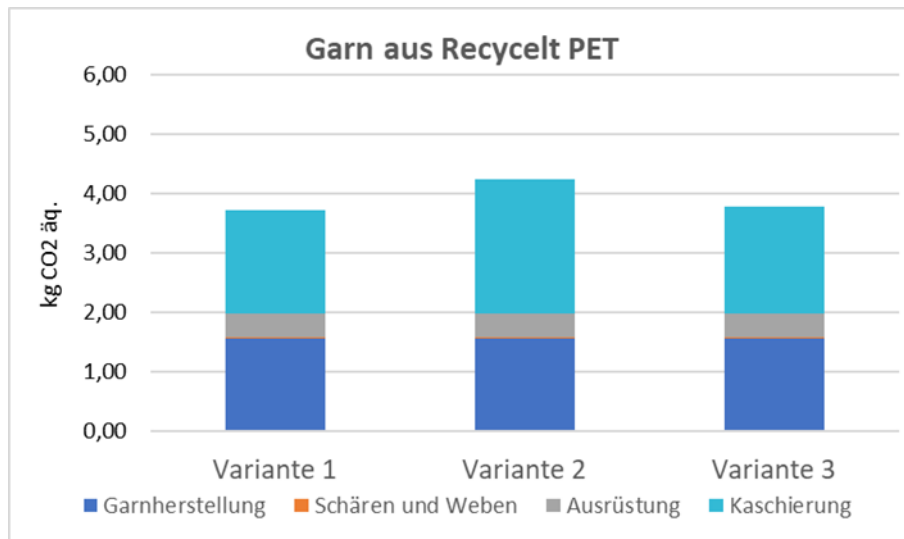


Figure 28: Comparison of the total GHG emissions with recycled PET yarn.

Methodology

The creation of a Product Carbon Footprint makes the greenhouse gas emissions of a product measurable and initiates a continuous improvement process that results in the responsible use of energy resources at all process levels and in all phases of the product's life cycle. The knowledge gained in this process will be used to understand a product's impact on the global climate, to identify further savings potential, and to demonstrate to customers and employees and other partners a responsible role in the commitment to environmental sustainability.

In doing so, the company acts according to the principle:

Avoid before Substitute before Compensate.

Set of rules

With the aim of achieving a high level of comparability and transparency in the results achieved, the Product Carbon Footprint was calculated in accordance with the Product Life Cycle Accounting and Reporting Standard (Greenhouse Gas Protocol). The standard, developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), is considered a best practice standard for product emissions accounting. The GHG Protocol is the most widely used international standard for the collection and presentation of greenhouse gas emissions.

The relevant indicator is the carbon footprint, which is expressed in CO2 equivalents (unit: kg CO2 eq.). This parameter indicates the amount of greenhouse gas emissions (GHG emissions) emitted by the manufacture of a product.

Principles of the GHG Protocol

Basically, the accounting of the PCF is implemented according to the following principles:

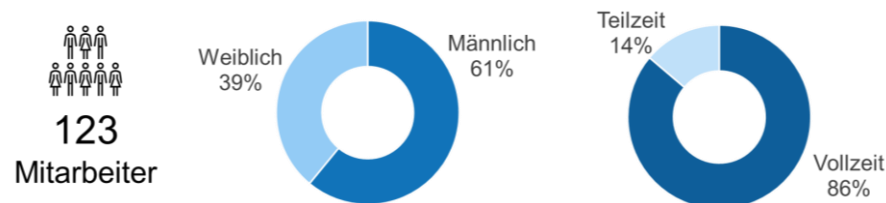
- **Relevance:** The methodology used as well as the final report should be relevant to the end user.
- **Completeness:** All significant emissions should be covered by the balance. Omitted emissions should be documented.
- **Consistency:** The inventory should be comparable over time based on the chosen methodology, the data collected and the assumptions made.
- **Transparency:** The accounting process, methodology, data sources, assumptions made, omissions, and results should be clearly documented.
- **Accuracy:** The accounting should reflect the emissions caused as accurately as possible and should not show too many or too few emissions.

EMPLOYEES AND SOCIETY

Achieving more together

For us, sustainability means taking responsibility: For our employees and for our region.

Our employees at a glance:



Good working conditions

From management to design and product development to production, the Wilhelm Kneitz AG workforce forms one big team. We tackle new challenges together, pull together and celebrate our successes together. We invest specifically in the region and in the competence of our employees and create a social environment in which everyone feels comfortable. To promote corporate cohesion among the workforce, we maintain an open dialogue and organize company get-togethers.

Teamwork

Teamwork is not just a word for us - it is a reality. With their know-how and experience, specialists from all departments ensure that the wishes and requirements of our customers are always implemented to their complete satisfaction. To be able to meet the constantly growing demands in the future as well, we train our specialists ourselves and promote educational projects in the region. In this way, we pass on our decades of experience from

generation to generation, thus ensuring the high quality of Kneitz products in the long term.



Figure 29: The entire workforce of Wilhelm Kneitz AG

Occupational safety and health protection

A specialist for occupational safety and two safety officers are trained, appointed and active in the company. The topic of occupational safety is supported and further developed by a company physician and other external institutions. These, together with the management representative, the works council and the employer representative, form the environmental and occupational health and safety committee.

Occupational health management is geared toward stress and employees and has been successfully implemented and further developed since 2013. Furthermore, we promote personnel and business management processes, always with the involvement of the works council. In addition to the installed representative for the severely disabled and the young people's

representative, the economic committee is also informed about operational issues, developments and goals and involved in decisions.

All employees receive regular instruction. The training is based on the Code of Conduct, the Occupational Health and Safety Act and the existing operating instructions and hazard prevention and alarm plans.

Occupational accidents are documented, evaluated and, if necessary, activities defined and implemented.

Equality and diversity

Wilhelm Kneitz AG supports a working environment that allows diversity and guarantees equal opportunities and equal treatment regardless of ethical origin, skin color, gender, disability, ideology, religion, nationality, sexual orientation, or social origin. These principles are defined in our Code of Conduct, which serves as a framework for orientation and action for all employees.

We oppose all forms of discrimination. Every supervisor is therefore required to act as a first point of contact for possible cases of discrimination. In addition, it is possible to communicate suspected cases or incidents anonymously via a specially created e-mail address. In addition, affected employees can contact the respective works council or equal opportunity representative. No cases of discrimination were reported in the reporting year 2021.

About equality between men and women, we primarily pursue two goals: Increasing the proportion of women in management and improving the compatibility of career and family. Wilhelm Kneitz AG promotes equal pay for men and women and pursues this goal not least as a company that is bound by collective agreements.

For employees who are remunerated according to the collective agreement, the company's collective agreement defines gender-independent criteria for job evaluation and the corresponding remuneration, so that equal pay for men

and women is already included in the company's remuneration system. The management of Wilhelm Kneitz AG consists of a female and a male board member.

In principle, all employees can apply for and be appointed to any job. Student internships are offered and carried out through all local schools. The company also offers apprenticeships for industrial, commercial and textile-technical professions.

Land, forest and water rights and forced eviction.

Wilhelm Kneitz AG advocates responsible regulation of ownership, tenure and use rights to land, fishing grounds and forests in order to promote sustainable social and economic development that contributes to the eradication of poverty and food insecurity and responsible investment. Wilhelm Kneitz AG complies with all applicable legal requirements regarding land, forest and water rights and forced evictions related to the "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fishing Grounds and Forests" unanimously adopted by the United Nations World Food Committee in May 2012.

Commitment to society

Social projects are close to our hearts - even outside our factory premises! One example of our social commitment is the Herbert Kneitz kindergarten with an attached daycare center. This helps our employees to reconcile family and career and makes a decisive contribution to a pleasant working environment in Markt Wirsberg. We also offer and promote part-time jobs.

We are also firmly rooted in the region when it comes to working in partnership with other companies. Our partners come from the immediate vicinity and form a flexible, competent network that has successfully brought the great tradition of the textile industry in Upper Franconia into the 21st

century. Wilhelm Kneitz AG, a moving company with spatial and mental proximity to its customers and strategic partners.



IMPRINT

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