



# SUSTAINABLE DEVELOPMENT REPORT **2017**

PEGAS NONWOVENS SA

(as of 1 January 2018 PEGAS NONWOVENS a.s.  
as of 19 June 2018 PFNonwovens a.s.)

29 June 2018



**PEGAS**

**N O N O V E I S**

every single detail



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# 1 Business model



**PEGAS NONWOVENS Group (hereafter “PEGAS” or “the Company” or “Group”) is one of the leading producers of nonwoven textiles in the EMEA region (Europe, the Middle East and Africa) for use primarily in the personal hygiene products market. PEGAS supplies its customers with spunmelt polypropylene- and polypropylene/polyethylene-based (“PP” and “PP/PE”) textiles principally for use in disposable hygiene products (such as baby diapers, adult incontinence and feminine hygiene products) and, to a lesser extent, in construction, agricultural and medical applications.**

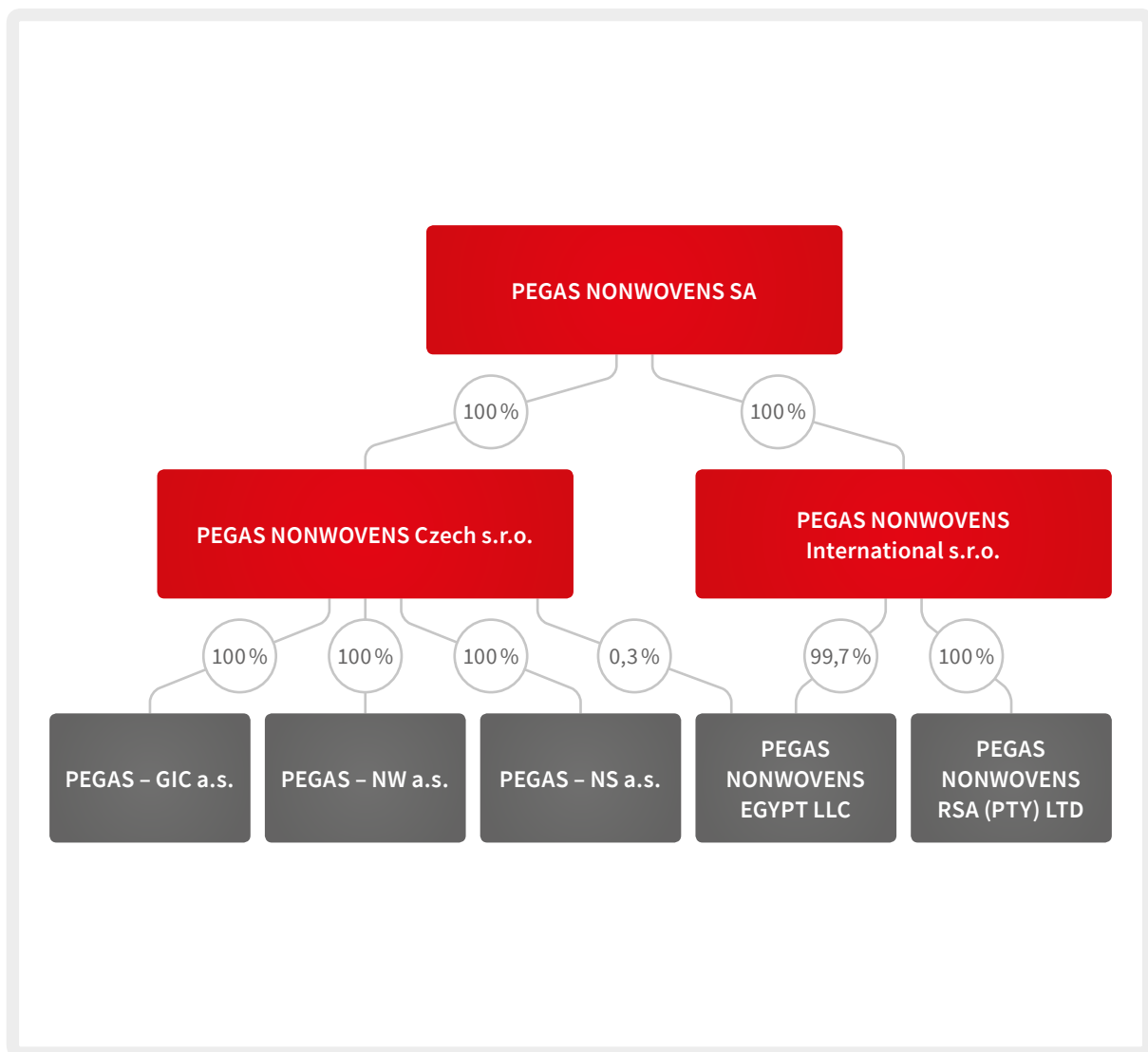
Founded in 1990, the Company has grown over the past almost three decades and based on 2016 annual production capacity, it has become one of the leading producers of spunmelt nonwovens in the EMEA region. PEGAS currently operates nine production lines in the Czech Republic and one production line in Egypt, which commenced commercial production in 2013. A new production line was put in commercial use in the Czech Republic during the second quarter of 2017. This new line increased the total production capacity by approximately 10 thousand tonnes of nonwoven textile. The total production capacity of the Company is currently up to 100 thousand tonnes of nonwoven fabric per annum in the Czech Republic and up to 20 thousand tonnes in Egypt.

PEGAS is a member of the European Disposables and Nonwovens Association (EDANA).

## **1.1 Organisational Structure**

PEGAS consists of a parent holding company in the Czech Republic and four operating companies, PEGAS NONWOVENS Czech s.r.o., PEGAS – NW a.s., PEGAS – NS a.s. and PEGAS – GIC a.s., all located in the Czech Republic. For the purpose of international expansion, a new company PEGAS NONWOVENS International s.r.o. was established in 2010 and subsequently PEGAS NONWOVENS EGYPT LLC was established in June 2011, which invests in the Egyptian production facility. In July 2016, a subsidiary PEGAS NONWOVENS RSA (PTY) LTD was established for the purpose of realization of the investment project in the Republic of South Africa. At the end of 2017, PEGAS employed 590 people.

The diagram below represents the structure of the Group as at 31 December 2017:



## 1.2 Business environment

PEGAS focuses on the production of nonwoven textiles principally for use in disposable hygiene products (such as baby diapers, adult incontinence and feminine hygiene products) and, to a lesser extent, in construction, agricultural and medical applications.

### 1.2.1 Overview of the Company's Products

#### a) Hygiene

The core of the Company's product mix are the following nonwoven textiles – *Pegatex® S*, *Pegatex® SMS* and *Pegatex® S BICO*, which are tailored to meet the specific needs of each and every customer and are further used for the production of:

- Disposable baby diapers
- Adult incontinence products
- Feminine hygiene products

In order to meet the highest requirements of customers in hygiene applications, PEGAS produces a wide range of light and ultra-light technologically advanced nonwoven textiles with excellent technical properties, which are soft, pleasant to touch and therefore provide improved comfort to the final consumer.

#### b) Medical and Protective Clothing

*Pegatex® S* and *Pegatex® SMS* nonwoven fabrics are semi-finished textile products for the production of

single-use protective clothing, meeting and exceeding the technical requirements for high standards of protection in dangerous workplaces for which they have been specifically designed and developed. Their characteristic high barrier qualities provide protection from aggressive liquids and prevent penetration of dust particles and micro-organisms. Due to these qualities they are used as semi-finished textile products for the following applications:

#### MEDICAL PROTECTIVE CLOTHING:

- Surgical masks
- Surgical gowns and drapes
- Head covers
- Shoe covers

#### INDUSTRIAL PROTECTIVE CLOTHING:

- Protective overalls and masks

#### c) Agriculture

For agriculture, PEGAS offers a nonwoven textile under the brand name *PEGAS-AGRO®*, which is used mainly in vegetable cultivation and gardening and is suitable for large-scale production and mechanisation. This material is used as a covering textile (crop cover) creating optimal microclimate for plants and sheltering them from weather changes (light frost, hail) and various pests and it is also used as a mulching fabric for preventing the growth and spreading of weeds.

#### d) Furniture and Construction Industries

In the furniture-making industry, the *Pegatex*<sup>®</sup> *S* and *Pegatex*<sup>®</sup> *SMS* nonwoven fabric is used as a neatening fabric (either on the back or bottom parts of upholstered furniture), and for seam reinforcement in the production of mattresses or as disposable hygienic bed covers.

In the construction industry, the *Pegatex*<sup>®</sup> *S* non-woven fabric is used primarily as a component of a composite material (modified by lamination) for the production of under-roofing covers, heat and sound insulation and wind barriers.

Product name	Application area	Key applications
<i>Pegatex</i> <sup>®</sup> <i>S</i>	Hygiene products	Baby diapers, feminine hygiene products, adult incontinence products
	Medical and protective clothing	Gowns, head and shoe covers
	Agriculture	Crop cover, mulching textile
	Furniture and construction industry	Mattresses, neatening fabrics, interlinings, wind barriers, roofing membranes
<i>Pegatex</i> <sup>®</sup> <i>SMS</i>	Hygiene products	Baby diapers, adult incontinence products
	Medical and protective clothing	Surgical drapes, gowns, face masks, industrial protective apparel
	Construction industry	Wind barriers
<i>Pegatex</i> <sup>®</sup> <i>S BICO</i>	Hygiene products	Baby diapers, feminine hygiene products, adult incontinence products
	Various industries	Composite fabrics, laminates
<i>PEGAS-AGRO</i> <sup>®</sup> Crop cover	Agriculture	Plant protection
<i>PEGAS-AGRO</i> <sup>®</sup> Mulching fabric	Agriculture	Soil cover



## 1.3 Market environment

PEGAS's key market is geographically defined as EMEA - Europe (Western, Central and Eastern Europe, Russia and Turkey), Middle East and North Africa.

The EMEA personal hygiene market, with an approximate 30% share of the total annual European non-woven production or 0.7 million tonnes, denotes the core area of business activity for PEGAS. This sector is defined by three major product application groups: disposable baby diapers, adult incontinence products and feminine hygiene products. Hygiene products have become a modern necessity, the demand for which is non-cyclical and compared to other market sectors is relatively unaffected by economic developments.

Geographically, the Company's core market continues to be the broader European area, consisting of traditional Western European countries, Central and Eastern Europe (CEE), including Russia. PEGAS started to serve the Middle East and North Africa region to a greater extent following the opening of the new production plant in Egypt. Lower saturation (lower per capita usage) of hygiene products in the Middle East and North Africa region and the developing CEE countries compared with Western Europe explains the accelerated growth in demand for non-woven consumables in these markets. On the other hand, Western Europe's ageing population, with increasing life expectancy and high income levels will support growth in the adult incontinence market. Modern light-weight and comfortable nonwoven textiles are leading to a greater acceptance of incontinence products by customers.

### 1.3.1 Competition

PEGAS's competition can be defined as European, Middle Eastern and North African producers of spun-melt PP and PP/PE nonwoven textiles, namely those active in the hygiene sector. PEGAS's main competitors are international and regional companies with production facilities located in Europe. Compared to other continents, the EMEA spunmelt PP- and PP/PE-based nonwoven textile market is much more fragmented, numbering more than 30 producers in total.

### 1.3.2 Customers

PEGAS's position as one of the market leaders in the EMEA hygiene nonwovens market has enabled it to develop longstanding relationships with customers that are leading producers of disposable hygiene products. PEGAS intends to continue to strengthen its existing customer relationships further by taking advantage of its in-depth understanding of customer needs, leveraging technological expertise and by introducing new and improved products and technologies. PEGAS works in close cooperation with its customers as well as suppliers in order to improve existing and introduce new improved products and product properties that primarily address specific customer requirements for softness and lower basis weights.

The Company's top five customers represented an 81.3% share of total revenues in 2017 (80.6% in 2016). The Company's present customer mix concentration reflects the situation in the hygiene nonwoven textile market, which is divided among a small number of end producers, each having a substantial market share.

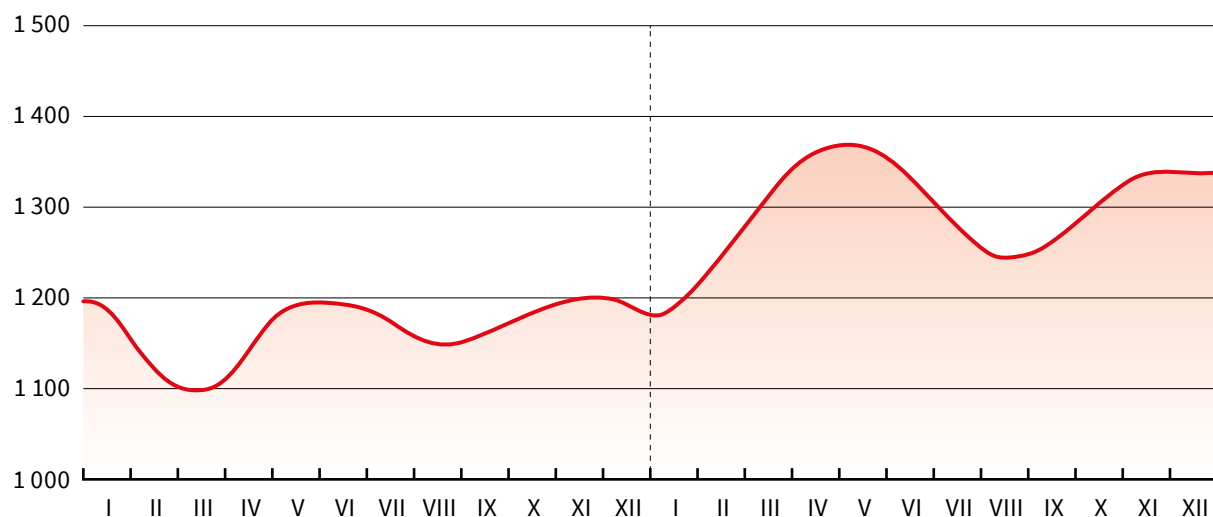
### 1.3.3 Suppliers of polymers

The main raw materials used for the production of spunmelt nonwovens are polymers, primarily polypropylene followed by polyethylene. In 2017, the consumption of PP and PE accounted for 79% (81% in 2016) of the Company's total operating costs (excluding depreciation and amortisation). During 2017, the Company had sourced polymer raw materials from a total of eleven suppliers. The polymer raw materials are purchased under both one year and multi-year agreements. The competitiveness of the suppliers is maintained by on-going benchmarking.

### Polymer market price development

The fluctuation and development of polymer prices may have, especially in the short-term a significant impact on the financial results of the Company. Changes in polymer prices are reflected first in the purchase prices, whilst they are reflected into final sales prices for customers with a certain delay. Thus, the development of polymer prices affects not only the costs of raw materials but also revenue levels. The development of polymer prices in Euros per tonne in 2016 to 2017 is shown on the included graph.

DEVELOPMENT OF POLYMER PRICES 2016 – 2017



It is apparent from the graph that polymer prices in 2017 were significantly more volatile compared with 2016. In 2016, polymer prices remained at low levels in a relatively narrow price band. From the beginning of 2017, prices saw a relatively substantial increase,

which culminated at the beginning of the second quarter. Over the course of the summer months, the prices returned to the level recorded at the beginning of the year and then slightly rose during the fourth quarter to almost the year's maximum level.

## 1.4 Trends and influencing factors for further development

### 1.4.1 Population growth and growing average life expectancy

Current population development such as population growth and growing life expectancy, and the related increase in demand for disposable hygiene products, which are not only functional but also very comfortable and aesthetic, create an opportunity for existing nonwoven textile manufacturers as well as new entrants.

### 1.4.2 Growing accessibility to healthcare and higher hygiene requirements

Healthcare is becoming available to an ever increasing share of the population. Access to healthcare is growing primarily in the developing regions of Africa and Asia, which is resulting in an increased demand for products from nonwoven textiles utilised in medical applications, e.g. face masks, gowns, etc.

Apart from the increasing access to healthcare, growing demand for medical products from nonwoven textiles is also being affected by the constantly growing demands for hygiene, and not only directly from medical facilities, but also outside of them. People are buying these products for their own personal protection against risks of infection (e.g. increasing

demand for respirator face masks during periods of higher occurrence of air-borne infections).

### 1.4.3 Guarantee of safe and harmless production

Demands of customers and end users are constantly increasing, especially for safety and non-toxicity of products, whether relating to the used raw materials, manufacturing processes, storage or transport. Customers require demonstrable certainty that products are harmless to health and meet all requirements.

These requirements already start with the demands placed on input raw materials. Customers demand guarantees over and above the legal framework that confirm the safety of the processed raw materials. The same is also true for the production process, on which increasingly higher demands are being placed and which the nonwoven textile manufacturer must meet in order to meet the standard required by the customer.

The most strictly monitored area of nonwoven textiles is compliance with the complete process of production, warehousing and transport to the customer. Contamination of production by dust, insects or other undesirable substances is considered to constitute malpractice of the producer and can potentially lead to the loss of a customer.

### 1.4.4 Reducing basis weight, utilisation of input raw materials

A trend in the disposable hygiene product segment is the growing emphasis on reducing the basis weight

of textiles. Customer demand for lighter materials is continuously increasing, however, these lighter materials must nevertheless meet high demands for absorption, air permeability, softness, etc. PEGAS is well aware of this trend and focuses its R&D on the development of lighter variants of existing products.

However, customer demand for materials with increasingly lower basis weights is not the only factor, the issue of responsible utilisation of input raw materials is also key. Production that consumes less raw materials improves the final product from the standpoint of environmental protection as well as better utilisation of non-renewable resources. Raw materials from renewable resources are gaining an increasing foothold in commercial production.

## 1.5 Objective and Strategy

The Company's strategy into the future is to:

1. develop and take advantage of growth opportunities to strengthen its market position,
2. maintain and extend technological excellence in spunmelt nonwoven textiles for disposable hygiene products in the EMEA region, and
3. provide solid returns to shareholders.

PEGAS intends to fulfil its strategy principally by focusing on the following areas:

*Continue Investing into Technologically Advanced Production Capacity:* PEGAS will strive to install state-of-the-art production capacities. The Company's latest

production line in Znojmo was put into operation in the second quarter of 2017. A strategically very important project is the installation of the semi-commercial production line RF5 Bico FHL R&D 2F. This line is based on an entirely new technology and, if successful, could provide an exceptional opportunity for the development and commercialisation of new products, i.e. diversification of the Company's product portfolio.

*Maintain Close Relationships with Customers and Suppliers:* PEGAS will continue to work together with its clients, machinery manufacturers and raw material suppliers to research, develop and implement new products ahead of the competition. PEGAS will endeavour to remain at the forefront of technical developments in the industry, supply its customers with the highest quality products and continually develop new materials.

*Focus on Technologically Advanced Products:* PEGAS is EMEA's largest producer of bi-component spunmelt nonwovens with extensive experience in the design and production of ultra-lightweight materials. During recent years, the Company has successfully commercialised several new materials with unique properties.

*Maintain good financial performance within the industry:* PEGAS's principal objectives are to continue to grow with its core target market, deliver revenues in line with this growth and maintain high operating margins relative to its core competitors. PEGAS is effective at generating significant levels of cash, which is subsequently used to support expansion or reduce outstanding debt.

*Monitoring investment opportunities:* The Company will continue to monitor investment opportunities outside the Czech Republic, whether these are acquisitions or the construction of new capacities abroad.

## 1.6 Visions and missions

### Company's vision:

Our vision is to continue in building a state-of-the-art nonwoven manufacturing company with an emphasis on every single detail and achieving outstanding product quality that will make us the preferred partner for innovative development, commercialisation and global roll-out of new products.

### Company's mission:

#### Development

- new production capacity added every two to three years,
- participation in the development of key markets,
- expansion into fast-growing developing markets through local investments
- monitoring of opportunities for mergers and acquisitions

#### Solid financial performance

- creation of value for shareholders,
- maintaining strong operating profitability,
- utilisation of cash flows for further expansion,
- long term cost effectiveness.

#### Leading position in the area of technology and quality

- technological leadership thanks to cooperation with technology suppliers and key customers,
- strong focus on technologically advanced products,
- timely implementation of new nonwoven textile technologies,
- long-term quality system improvement – Pegas Quality System

## 2 Policies and due diligence



During the course of its activities, the PEGAS Group is continually exposed not only to business risks but also to risks related to the assurance of high quality of produced products and adherence to the fundamental principles of environmental protection.

The PEGAS Group implemented and further develops its own quality management system – Pegas Quality System (PQS). Quality and sustainability are strategic priorities across all areas of activity of the PEGAS Group, and PQS principles are implemented by the company's management at all levels of management and applied by all employees.

The objective of the PEGAS Group is long term prosperity achieved through continuous self-improvement for the purpose of ensuring customer satisfaction with its products and services. Quality awareness as a key factor, company culture and constantly high quality of produced products is regularly acknowledged by the customers of the PEGAS Group.

PQS is an open system that meets the requirements of standards ISO 9001:2015 and ISO 14001:2015, however, concurrently also aligns with its own implemented quality management tools and the quality management methods of key customers.

The high standards of the PEGAS Group's quality culture are based on the following fundamental pillars:

- Advanced technology and processes
- People
- Proactive self-improvement
- Goals and results

The risks connected with the activities of the PEGAS Group are regularly monitored and assessed within the scope of the PQS. Great importance is placed primarily on the prevention of contamination of finished products, cleanliness and order at all workplaces and in-house fundamentals of hygienic work practices.

All production premises are equipped with over-pressure air control to eliminate the risk of insects contaminating textiles. A camera detection system is installed on all production lines for the hygiene segment for the purpose of continuous detection of all types of textile defects including any form of external contamination. Furthermore, the company has recently implemented several projects developed in-house for the purpose of significantly reducing the risk of contamination of products sourced from the external environment outside the production process, namely in regards to the handling and packaging and also the risks arising from the packaging method of input raw materials.

#### QMS AND EMS POLICY OF THE PEGAS GROUP

*(wording is effective at the publishing date of the Sustainable Development Report 2017)*

*Employees of the PEGAS Group are aware and acknowledge their responsibility in the area of quality assurance of the produced products and adherence to the fundamental principles of environmental protection. QMS and EMS policy applies in full extent to the production, design + development and sales of nonwoven textiles. Within the scope of its objective to have a functional quality management system in the sense of the ČSN EN ISO 9001 standard and environmental*

management system in the sense of the ČSN EN ISO 14001 standard, senior management of the PEGAS Group has adopted the following fundamentals and principles:

#### 1. We respect the customer, we respect the environment

We maintain very close relationships with our customers. Thanks to this, we are able to react flexibly to all their needs, requirements and expectations.

The fundamentals arising from the implemented environmental management system enable us to deliver products to our customers that are harmless and ecologically sound.

#### 2. The first priority is product quality and environmental protection

We guarantee the quality of our work by using modern production equipment, by the stability of the individual processes, by using modern measurement methodologies and by the qualifications of our employees.

We produce our products and orders in the required quality and within agreed upon deadlines, whilst ensuring the smallest possible impact on the environment.

Environmental impacts are minimised namely in the following areas:

- Lowering workplace and external noise levels.
- Lowering the amount of waste and rigorously sorting waste according to its hazard level.

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→ Handling of chemical substances in accordance with the rules according to valid laws and adherence to workplace health and safety principles.

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→ Lowering the amount of harmful substances (per unit of production) emitted into the atmosphere.

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→ Lowering the amount of harmful substances (per unit of production) emitted through production water into the ground water.

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Through our continuous effort to improve the quality of our products and to protect the environment we attempt to achieve the satisfaction of our customers and to strengthen our company's position in the given market. Product quality and environmental quality is the responsibility of every employee of the PEGAS Group.

#### 3. Economy and efficiency

Through regular assessment of our processes we create an effective tool for improving the effectiveness of our QMS and EMS. Together with our suppliers, we develop cooperation at partner relationship levels. We adopt measures that enable us to reduce costs, to prevent all forms of waste, to utilise de-facto waste-free operations and thereby also ensure environmental protection to the greatest degree possible. We continually seek opportunities for the reduction of electricity, gas, water consumption (per unit of production) and the minimisation of packaging materials.

#### 4. Compliance with respective legal requirements and other requirements

We monitor all legislative changes to ensure that during all activities and procedures, all generally binding



*legal norms related to the activities of the company, including in relation to the environment, are unconditionally and rigorously adhered to.*

#### **5. Employees of the PEGAS Group**

*We value creative and professionally capable employees. By motivating them to be productive and perform good work, we create the prerequisites for the continuous improvement of our quality assurance and environmental management system and for all to gain satisfaction from their work. We provide for the continuous development of all our employees both in terms of their professional competencies as well as knowledge in the area of quality and environmental systems.*

#### **6. Public interests**

*Through continuous improvement of the environmental system, we increase the level of prevention of potential environmental pollution. By means of these improvements and thanks to adherence to all generally binding legal environmental norms, we ensure that our activities have the lowest possible impact*

*on the environment. We are strengthening the open approach and dialogue with employees, the public and other stakeholders by accepting and reacting to their needs.*

#### **7. Investors**

*We are fully aware of our responsibility towards investors and shareholder and through our activity we aim to create conditions for achieving sustainable success for the organisation. Financial results and presentations for investors are an integral part of our website [www.pegas.cz](http://www.pegas.cz).*

#### **8. Business environment**

*We monitor and verify information about all other stakeholders and their relevant requirements by assessing the aspects arising from the legal, technological, competitive, market and social and economical environment in order for us to be able to continuously provide products and services that meet the requirements of customers and respective laws and regulations.*

# 3 Main risks and their management



With the goal of fulfilling the Company's strategy, internal and external aspects and matters derived from the legal, technological, competitive, market, cultural, social and economic environment and from the environmental area are thoroughly assessed.

To have the ability to continuously provide products that meet the customers' requirement and respective laws and regulations, which do not negatively impact the environment, the stakeholders and their requirements have been clearly defined.

For the internal and external aspects and likewise for all stakeholders, a risk analysis has been drawn up, measures have been set for their minimisation and opportunities for further development have been identified.

With respect to the make-up of the hygiene market, which is divided between a small number of players with large market shares, the greatest risk faced by the Company is the loss of a customer or a decline in their order volumes. The top five customers represented an 81.3% share of total revenues in 2017 (80.6% share in 2016). The Company maintains and solidifies its relationships with existing custom-

ers and attempts to also reduce the aforementioned risk by expanding the customers' portfolio by means of new products and projects aimed at gaining new market shares on the existing market and likewise in new markets.

A very significant risk is also the loss of a customer resulting from his potential loss of end consumers. The Company attempts to mitigate this risk to the greatest degree possible by means of a set of measures identified in customer audits, assessments of customers, complaints and quality alerts as well as by maintaining close contact with customers by means of personal meetings and regular telephone conferences.

The main input raw materials of the Company are polypropylene and polyethylene. There is a limited number of suppliers of these raw materials present in the market. The risk derived from a potential outage in the deliveries of these strategic raw materials is reduced by the Company by setting advantageous conditions, such as maintaining safety stock, contractual supplier obligations, qualification alternatives, etc. The Company regularly carries out an assessment of its suppliers.

## 4 Process for selecting key areas and key performance indicators



The Company regularly sets goals and extraordinary projects for further improvement in both quality and the environment aspects, and assess their results.

When setting goals for further development, PEGAS Group's QMS and EMS Policy fundamental principles are always adhered to, with the following also considered:

- current and future needs of the organisation and the market,
- results of quality management system audits,
- competitor analysis, benchmarking,
- resources necessary for achieving these goals.

All goals that are set should help in achieving the main goals and strategies of the Company (see chapter 1.5).

PEGAS is well aware of the importance of transparency in the area of sustainable development and considers the issue of sustainable development as an essential prerequisite for the successful development of the entire PEGAS Group. This report should give not only investors but also the general public the opportunity to gain a more in-depth understanding of how the Company functions and its activities in the area of sustainable development.

The PEGAS Group has the following key areas for its development and business:

- environment,
- social and employee issues,

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→ observance of human rights,

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→ anti-corruption measures.

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These key areas were selected in accordance with the strategy, vision and internal policy of the Company. All the here-described aspects significantly affect not only the everyday operation of the Company but also determine its further development and position in the market.

The management of the Company is convinced that the achievement of financial success is unconditionally interconnected with a responsible approach to economic matters and social issues, and the same attention must be paid to it as to other aspects of the business. Creating and maintaining safe and quality work conditions for employees, observance of human rights, considerate and the responsible handling of natural resources is a responsibility for PEGAS that it has voluntarily elected to fulfil. A prerequisite for success in all the selected key areas is the acceptance of and identification with this strategy across the entire Company from the owners, through to the managers and all the way to the individual employees.

Within the framework of its activities, PEGAS complies with all relevant international treaties, laws, internal regulations and ethical standards and acts in accordance with them.

## 4.1 Key area – the environment

Protection of the environment and the creation of a safe and healthy work environment for employees ranks amongst the highest priorities of the Company. The quality of both areas undergoes continuous improvement. The Company also focuses on protecting the atmosphere against pollution and makes consistent efforts to lower the negative impact of its activity on the environment.

PEGAS has implemented and maintains an environmental management system to take care of all environmental aspects as required by ISO 14001. The production process involves the transformation of PP or PE raw materials into the form of fibres through the application of heat and pressure. This process results in minimal chemical changes to the material and produces limited atmospheric emissions. All the defined environmental aspects in the Company are monitored and assessed.

The senior management of the PEGAS Group has adopted key principles to meet all environmental requirements. The employees of the Company have been instructed about these principles and are conscious of their responsibility in fulfilling and adhering to them.

**To meet all environmental requirements the following fundamentals have been accepted:**

### Compliance with environmental regulations

- Meet the requirements of legal regulations in force for environmental protection and other requirements, to which the Company has made a commitment.

We monitor all legislative changes to ensure that during all activities and procedures, all generally binding legal norms related to the activities of the PEGAS Group, including in relation to the environment, are unconditionally and rigorously adhered to.

### Minimising environmental impact

- Lower workplace and external noise levels.
- Lower the amount of waste (per unit of production) and rigorously sort waste according to its hazard level.
- Handle chemical substances according to rules set by legislation in force by being considerate to the environment and adhering to workplace health and safety codes.
- Reduce the amount of harmful substances (per unit of production) emitted into the air.
- Reduce the amount of harmful substances (per unit of production) emitted through production water into the ground water and the sewage system.
- Maximise reprocessing of production waste (recycling).

- 
- Maximise reprocessing of production waste in the form of regranulate<sup>1</sup>.
- 

Through continuous development of new products, improvement in the quality of our products and protection the environment, we attempt to achieve the satisfaction of our customers and to strengthen our Company's position in the market. Product quality and environmental quality is the responsibility of every employee.

### **Economy and efficiency**

- 
- Continually seek opportunities for the reduction of electricity, gas and water consumption per unit of production.
  - Continually seek opportunities for the reduction of raw materials and minimisation of packaging materials per unit of production.
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We adopt measures that enable us to reduce costs, to prevent all forms of waste, to utilise de-facto waste-free operations and thereby also ensure environmental protection to the greatest degree possible. We continually seek opportunities for the reduction of electricity, gas, water consumption and for minimisation of consumption packaging materials.

### **Emergency preparedness**

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- Strive for the prevention of emergency situations, and in the event that they do occur, proceed according to emergency plans ensuring the minimisation of negative environmental consequences.
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### **Products and services**

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- Assess the environmental impact of planned new production facilities and products prior to their approval.
  - Provide information about the Company's products in the area of safe use, transport, storage and disposal of these products.
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### **Contractual suppliers**

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- Strive for and require from all suppliers that their products meet all conditions for minimal environmental impact.
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### **Education of employees**

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- Educate, train and motivate employees so that they perform all their activities with maximum responsibility in respect to the conservation of resources and environmental protection.
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1) Regranulation – Method for recycling scrap textile into granulate, which can then be fully reused in the manufacturing process.

### Open approach and public interests

- Strengthen the open approach and dialogue with employees, the public and other stakeholders by accepting and reacting to their needs.
- Regularly provide information about the effects of the Group's activities on the environment.
- Meet all requirements so that we remain a good neighbour.

The Company has drawn up a register of legislative requirements regarding selected environmental aspects. The main source of environmental aspects are primarily the individual production technologies, energy sources, wastes and the individual products. The most significant environmental aspects at the individual sections include:

- issue of wastes and packaging,
- acoustic emissions and immissions,
- chemical emissions and immissions,
- raw material resource management,
- handling of environmentally damaging and hazardous substances (oils, lubricants, gas, waste water),
- handling of chemical substances.

### Goals up to 2030

- Install an energy efficient form of lighting at the production lines and concurrently reduce power consumption by 2020.
  - ↘ Light must be effectively directed in the required direction.
  - ↘ Only environmentally-friendly lighting shall be installed, which shall eliminate dangerous substances in light tubes – fluorescent light tubes will be replaced with LED lighting.
  - ↘ Lower electrical power consumption for lighting at the production lines by 2%.
- Maintain the share of purchased power from renewable resources at a level of at least 20% of the total energy mix in the Czech Republic and 14% in Egypt.
- Reduce direct emissions (Scope 1) per unit of production by 2020.
  - ↘ Replace refrigerant gas R22 in all air conditioning units.
  - ↘ In Egypt, replace all propane-driven forklift trucks with electrically-powered ones.
- Zero disposal of waste to waste dumps.
  - ↘ Systematic reduction in waste volumes and increase in recycling.



- ↘ Zero disposal of recyclable and reusable wastes to waste dumps from 2024 onwards – this goal has already been achieved.
- Seek alternatives for reducing the environmental load caused by packaging.
- ↘ Project for replacing wooden pallets with returnable plastic pallets (made from recycled plastic):
  - ↘ 2017 – 50% of pallets used internally were replaced with plastic pallets,
  - ↘ 2020 – 100% of pallets used internally to be replaced with plastic pallets,
  - ↘ 2025 – 100% of all pallets to be replaced with plastic pallets or packaging without pallets.
- Reduction of nonwoven textile basis weights through new technologies and procedures.
  - ↘ Reduction of consumption of raw materials by 1% by the end of 2018.
  - ↘ Reduction of consumption of raw materials by 2% by the end of 2020.
- Increase recycling.
  - ↘ Reduction of consumption of raw materials by 4% by the end of 2030.
- Commercialisation of projects targeted at using raw materials from renewable resources by the end of 2020.

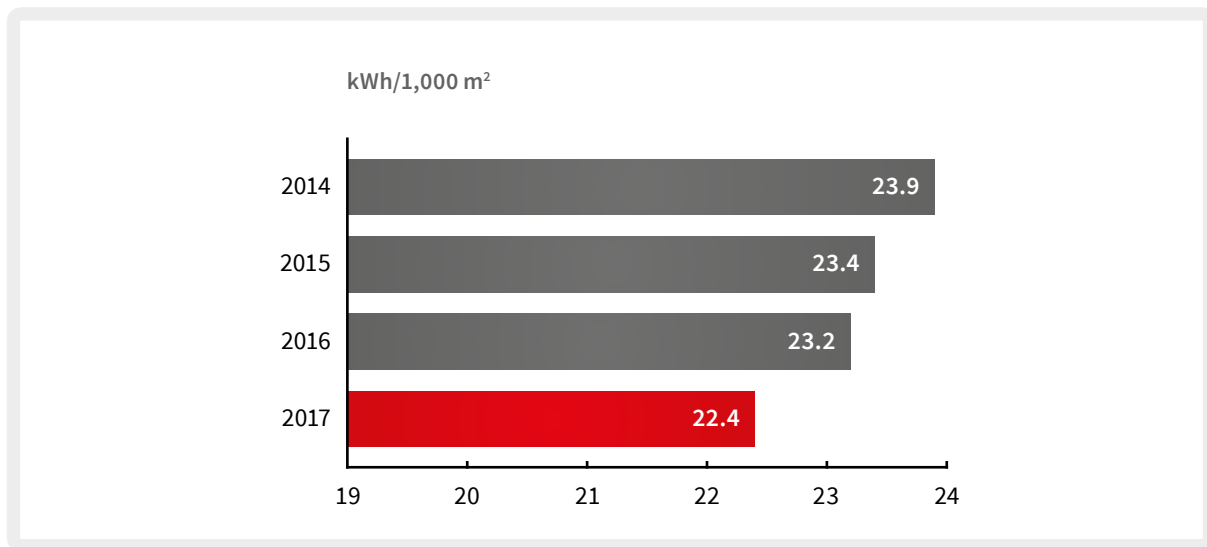
- Reduction of water consumption per unit of production.
- ↘ Reduction of water consumption in Znojmo from own source by 10% in 2018.

#### 4.1.1 Carbon footprint

##### a) Electricity

The main source of energy for the production of non-woven textiles is electricity, which also constitutes the main share of the Company's carbon footprint. As mentioned above, the Company has committed itself to lowering the amount of energy consumed per unit of production. Thanks to the implementation of the latest technologies and the production of materials with a lower basis weight, year by year the PEGAS Group is significantly reducing its carbon footprint, which is not merely an ecological trend but also a factor that is financially beneficial to the Company. This trend clearly indicates that the Company is on the road to sustainable development.

The trend in electricity consumption per unit of production output is shown in the following chart.



Between 2016 and 2017, the Company significantly reduced its electricity consumption per unit of production. This reduction is on the one hand the result of a growing demand for materials with a lower basis weight and on the other hand the result of the installation of a new modern production line at the beginning of the second quarter of 2017, which is characterised by its efficient power rating.

#### b) Emissions

Every year, PEGAS carries out an emissions assessment based on GHG Inventory reports “*Inventory of greenhouse gases*”, which include direct and indirect emissions.

#### DIRECT EMISSION – SCOPE 1

Emissions directly produced by PEGAS. These emissions are created during the activities performed directly by the given company and are controlled by the company. They include, for example, emissions from the combustion of gases, fuels or emissions from industrial processes.

#### INDIRECT EMISSION – SCOPE 2

Emissions connected with the consumption of purchased energy (electricity, heat, steam or cooling), which was not created directly at the company but is consumed as a result of the company’s activities. The sources of the emissions are not directly controlled by the company.

The development in the production of emissions by PEGAS in the years 2015-2017 is shown in the following two charts. The slight increase in emissions in 2017 is the result of increased consumption of electricity, which falls into the category of indirect emissions (Scope 2 emissions).

<b>Tonnes of CO<sub>2</sub>/year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Direct emissions	1,191	1,663	1,637
Indirect emissions	128,201	126,991	139,776
<b>Total emissions</b>	<b>129,391</b>	<b>128,654</b>	<b>141,413</b>

<b>kg CO<sub>2</sub>/1,000 m<sup>2</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Direct emissions	0.20	0.28	0.25
Indirect emissions	21.83	21.40	21.16
<b>Total emissions</b>	<b>22.03</b>	<b>21.68</b>	<b>21.41</b>

Total emissions (tonnes of CO<sub>2</sub>/year), as a result of the installation of the new production line, increased, however, total emissions per unit of production declined as did electricity consumption per unit of production. Indirect and direct emissions per unit of production fell year-on-year and are, thereby, in accordance with the Company's strategy. In upcoming years, the Company expects to maintain the low levels of total emissions per unit of production.

### c) Communal air pollution

The Company regularly measures communal air pollution. An authorised external company is used for this task. The measurement results are archived and are available to competent entities upon demand.

### d) Workplace air pollution

The measured emissions at our production facilities are several orders of magnitude below the limit values, therefore, air at the workplace is not being polluted.

## 4.1.2 Noise

PEGAS regularly measures noise emission levels at the workplace and measures external noise emission levels. An authorised external company is used for this task. The measurement results are archived and are available to competent authorities upon demand.

## 4.1.3 Waste management

All types of wastes and packaging are stored, sorted and recorded according to valid laws. Contracted external organisations are used for waste disposal. These organisations are specialised, competent and accredited in the area of waste disposal. Emphasis is placed on increasing the awareness of all employees about the need for correct handling of all types of wastes and packaging. Already since 2005, the Company has been regularly conducting training of employees from selected departments (production,

logistics, maintenance, quality management) about the possible risks of environmental damage during the performance of routine tasks. Over and above the legal requirements in force, the Company sorts communal waste into paper, plastics, glass, metal, bio-waste and mixed wastes.

A very significant part of waste from production (trimmings and rolls of 2nd grade nonwoven textile) are recycled back into the production process. The remaining waste is regranulated using two in-house regranulation lines in the Czech Republic and one in Egypt, whereby it can be utilised again for production. Development in the processing of production waste and regranulated material in the production process:

<b>Processing of total waste in %</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Waste returned to production	27%	22%	27%
Regranulate returned to production	22%	21%	26%
<b>Total</b>	<b>49%</b>	<b>43%</b>	<b>52%</b>

On a year-on-year basis, the Company is increasing the share of processed waste, between 2016 and 2017 it increased by 9%. During the production of certain types of products, however, neither waste from production nor the regranulated material may be used, and therefore the remaining waste (production waste and regranulate) is sold to external customers who process it further in the production of plastic products. In this way, practically the entire production technology is waste-free.

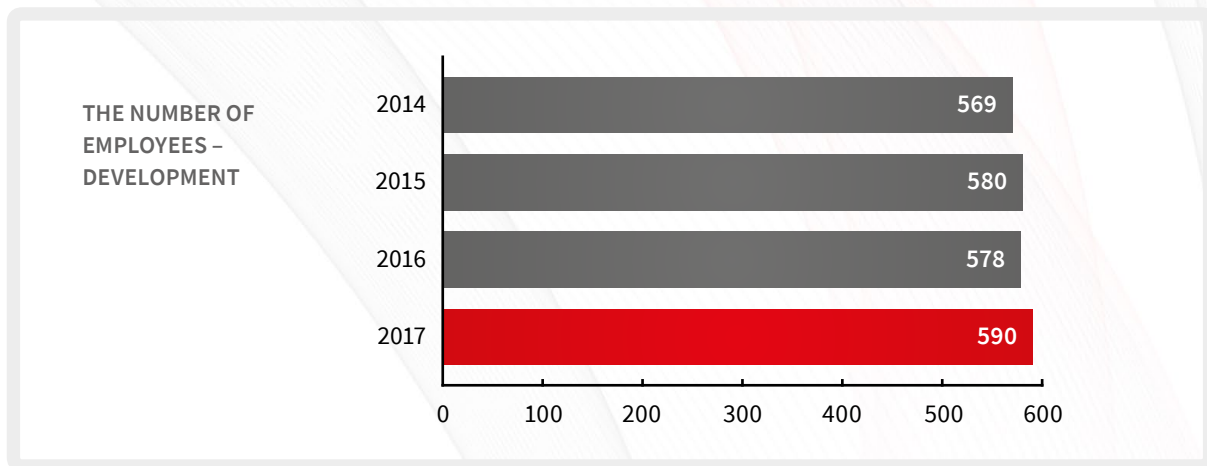
## 4.2 Key area 2 – social and employee issues

The PEGAS Group strives to create a work environment that fosters motivation, performance and a high level of creativity in its employees.

PEGAS promotes fundamentals of equal opportunity and equality regardless of ethnic origin, skin colour, gender, physical disability, world opinion, religious conviction, nationality, sexual orientation, social origin or political opinion, if they are based on democratic principles and tolerances towards persons of a different conviction.

PEGAS has had a long-term focus on increasing the social standards above the level set by law, to improve working conditions and workplace health and safety for employees, and it makes further voluntarily investments into human capital. Fair recruiting procedures for new workers, non-discriminatory treatment of minorities and informing employees about company matters are considered to be standard.

PEGAS is a significant employer not only in the Czech Republic but also in Egypt. Thanks to the construction of new production lines in South Africa and the Czech Republic, new work opportunities will be created in these regions. Employees for the new positions will start being recruited already in the 2nd half of 2018. The development in the number of employees of the Group is shown below.



Grouping of Company employees by country of employment:

Country	2014	2015	2016	2017
Czech Republic	470	480	478	490
Egypt	99	100	100	99
South Africa	0	0	0	1
<b>Total</b>	<b>569</b>	<b>580</b>	<b>578</b>	<b>590</b>

#### 4.2.1 Workplace safety

Protection of safety and health of employees is one of the most important priorities in the area of the comprehensive care for employees. Ensuring a healthy work environment and rigorous adherence to legal regulations governing work hygiene are an integral part of the Company's social policy.

The objective is to provide for a safe and healthy work environment at all workplaces and to take appropriate steps to eliminate potential hazards to the greatest degree possible.

OSH policy is reviewed regularly. A qualification component of employees at all levels is the effective and methodological application of continuous improvement of preventative measures, knowledge and

adherence to fundamentals and responsibilities in safety and protection of health.

Among the positive factors affecting the level of workplace safety is also the modernisation and maintenance of the Company's fleet of machines and equipment and the high degree of order and cleanliness at all workplaces.

#### 4.2.2 Social benefits

##### a) Pension insurance

PEGAS Group provides a pension insurance contribution based on the number of years an employee has worked at the Company. The vast majority of employees take advantage of this benefit. The objective in providing a contribution to employees into the pension insurance system with a government contribution is to express joint responsibility and participation in creating better living conditions for its employees in their old age.

##### b) Food and catering

The option of discounted meals at eateries located at the production plants contributes to improving employee work conditions. Employees working night shifts or over the weekend have access to frozen or refrigerated meals that they may prepare in separate rooms directly at the workplace.

##### c) Support of employees and their families

The Company invests considerable resources into the support of social policy relating to its employees or their family members.

The Company provides financial gifts for the occasion of various anniversaries of its employees. Furthermore, PEGAS rewards long-term employees upon retirement, handles the consequences of organisational changes by increasing the legal severance pay, and it rewards blood donors. It also helps with employee housing by providing interest-free loans and provides employees with a contribution for vacation and for the recreation of the employees' children.

All employees have one week of holiday over and above the legal scope of the Labour Code (total of 5 weeks of holiday) and shortened working hours of 37.5 hours per week.

##### d) Benefit program

The employee benefit program includes the option of various discounts and promotional events from selected businesses. The program is regularly updated and expanded to include new participating companies.

### 4.2.3 Training and recruiting

#### a) Education

For PEGAS the area of training and development of professional, technical and personal abilities and qualities of every employee is a prerequisite for ensuring the long term business development of the Company.

The senior management of the PEGAS Group declares for the expected development of the Company full participation or partial-participation on the organisation or payment of costs of the employee training process. It applies this strategy for the type of training events that it considers, from its standpoint, to be absolutely necessary for the development of human resources, which form one of the fundamental pillars of the Company.

Consequently this means that persons who are significantly responsible for setting goals, development trends of the Company, in-house production, development of new technologies, carrying out business, implementing new systematic measures and elements, should be top experts in their given field and have the opportunity to purposefully and intentionally develop under certain stimulus and participation of the Company.

#### b) Recruitment

When filling available positions, PEGAS gives preference to existing company employees ahead of external applicants, with the objective of taking advantage of the current qualifications of the employees,

thereby increasing the desirable mobility within the Company and fostering the existing employee's identification with the Company.

#### c) Cooperation with universities

The Company cooperates with Czech universities (e.g. TU Liberec, VŠCHT Praha, VUT Brno, etc.). Cooperation consists of industrial-academic cooperation between university faculties and technical development departments of the Company focused through a project form on the exchange of know-how, experience and solutions to specific technical and research problems.

### 4.2.4 Sponsoring

PEGAS is aware of the importance of adhering to the fundamental principles of social responsibility. Better treatment of people and the surrounding environment is a consciously set objective. Only such behaviour can result in a growing ability to affect "not only" financial parameters but also social conditions, which reciprocally affect business conditions.

The Company supports several sports and cultural events in the region, for example Znojmo Children's Centre or the ZŠ Přímětice volleyball team (further information available in the Sponsoring Brochure or in Annual Report 2017).

### 4.3 Key area 3 – observance of human rights

Observance of human rights is an integral part of the Company's policy and all its activities, and it also forms part of the document Human Rights Policy. The current version is available at the Company's website <http://www.pegas.cz/en/corporate-strategy>. PEGAS acts fully in accordance with all local and international legal regulations and demands adherence to these rules also from its business partners, suppliers and employees.

#### HUMAN RIGHTS POLICY OF THE PEGAS GROUP

*(wording is effective at the publishing date of the Sustainable Development Report 2017)*

*The companies of the PEGAS Group declare that within the framework of all global production plants, they adhere to the fundamentals and internationally recognised human rights as described in Czech law, including the fundamental principles and rights as implemented into Czech law pursuant to the Universal Declaration of Human Rights of the United Nations (UN) and the Declaration on Fundamental Principles and Rights at Work of the International Labour Organization (ILO) such as:*

- *special legal employee status protection,*
- *satisfactory and safe work conditions*
- *fair employee remuneration,*

- *proper work performance by the employee in accordance with the legitimate interests of the employer,*
- *equal treatment of employees and prohibition of their discrimination,*
- *freedom of association and acknowledgement of the right to collective bargaining,*
- *ban on forced and child labour,*
- *employee workplace health and safety*
- *etc.*

*The subsidiaries of the PEGAS Group also acknowledge gender, cultural, ethnic, racial and religious equality, and do not tolerate any form of discrimination and guarantee the same rights, responsibilities and opportunities to all regardless of race, skin colour, religion, gender, sexual orientation, citizenship, family status, origin, age or health disability. Apart from this, the subsidiaries of the PEGAS Group also call upon their suppliers and other cooperating entities to also adopt similar obligations within the scope of their business activities.*



#### **4.4 Key area 4 – anti-corruption measures**

All business activities of the PEGAS Group are based on the fundamental principle of equal treatment of all its customers, suppliers and other stakeholders. All activities of the PEGAS Group therefore are based on fundamentally zero tolerance of corrupt behaviour in all its forms, and likewise to other forms of illegal, namely criminal behaviour.

Since the establishment of the PEGAS Group, there have been no cases of corruption or suspicion of corrupt behaviour.



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[www.pegas.cz](http://www.pegas.cz)