



# Environmental declaration

## 2021



# Environmental declaration

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## 1. Company History

PAPUREX was founded in 1977 by Werner Büchner as a partnership.

Back then, PAPUREX used to manufacture polyamide, polyurethane, and Teflon tubing. The former manufacturing program can still be found in the company's name PAPUREX:

PA = Polyamide

PUR = Polyurethane

EX = Extrusion

During the founding year, PAPUREX processed 500 kg of polyurethane per month, which exclusively was polyurethane based on polyester. The whole production department only consisted of one production line.

In 1981, PAPUREX W. Büchner GmbH was founded on that basis and the production focused on the manufacturing of polyurethane tubing thenceforth.

Already in 1983, a second production line was purchased and three more were to follow in 1987, 2000, and 2004. In addition, PAPUREX uses a three-shift system since the beginning of 2008 to increase its production capacities.

In 2021, we celebrate our 40th anniversary.



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## 2. Services

PAPUREX offers a broad range of products, which are additionally combinable in a flexible manner:

Besides the unique quality of PAPUREX products, a large degree of flexibility, reliability, and speed in production and order processing qualify PAPUREX as your competent address in the matter of polyurethane tubing.

For instance...

- we manufacture any desired dimension between 1mm inner diameter and 28mm outer diameter
- combination of tubes with different outer diameters or made from other material to multiple tubing is possible. No matter if duo (twin tubing), trio (triple tubing), sextuple tubing, or even an exceeding number of tubes, almost no boundaries are set.
- we deliver cut-to-size tubing accurately to the millimeter in a broad range of lengths - starting around 10mm.
- customized marking with text at buyer's option or company logo enlarges the possibilities to individualize our tubes.



## 3. Direct and indirect environmental aspects

Besides the direct environmental aspects as resources and energy (electricity and heating), water, handling of hazardous substances and waste, PAPUREX is takes the responsibility for indirect environmental aspects as well. This includes collaboration with local businesses as our contribution to the support of the local economy, as well as several reconstruction and investment projects.

### 3.1. Waste and hazardous substances

With great diligence, PAPUREX separates the different types of waste. Thereby, we try to minimize the arise in the first place and to optimize the handling of waste consistently. Thus, the whole amount of residual waste of our 50-employee company is equal to a single person's household. General principles to avoid packaging waste are naturally applied at PAPUREX: Snacks are packed in reusable boxes instead of aluminum foil. Coffee or tea tastes the best out of ceramic cups instead of disposable ones. The excellent tap water of the region is consumed directly out of the tap or a dispenser, which has an additional sparking water function. A simple principle applies to all these topics: A spare use of our goods and materials, besides the careful handling of the inventory and machines, is not only environment friendly, but spares the wallet as well.

The excess solvents used during production process are collected, kept safely, and picked up by a mobile disposal service for hazardous substances and professionally removed.

For wooden reels, often used for bulk orders, a general deposit is charged, which gets refunded if the empty reels are returned intact. This method is an advantage for both business partners because the usability of long lengths on reels is very economic, PAPUREX can use them again for future orders and the overall packing waste is reduced.

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## 3.2. Electricity

Since 2003 PAPUREX receives its energy from Germany's largest provider of green energy, which generates it from wind parks and especially from water energy. The Company's name is LichtBlick (see the certificate in chapter 5) and it is not only known for



fairness and customer-friendliness but also several sustainability projects in Ghana, Nepal, Ecuador, and Germany with which LichtBlick contributes to the improvement of the environment and living conditions daily.

Furthermore, since middle of the year 2018, PAPUREX contributes to the production of solar energy due to the commissioning of our new solar plant. Ever since 32 photovoltaic modules collect solar energy to produce electricity. The latter is needed in large amounts for the production of our products which get manufactured even more environmentally friendly than before.

The installation of a charging point, at which the employees can load their vehicles (4 electric vehicles by 2020) as well as their E-bikes, has been a further step. Another one was the exchange of former halogen lighting against LEDs at the whole factory premises. Moreover, through the acquisition of an electric forklift, the CO<sub>2</sub> emission could be reduced further.

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## 3.3. Regional Aid

A further strategy for more sustainability is local and regional collaboration. For example, PAPUREX prioritizes companies of surrounding townships from the locksmith to IT and focuses on recruiting local professionals. This does not only lead to shorter journeys and quicker communication but also supports the region's economy. Our partners for advertising technology, metalworking needs, and tool technology are all based in Mörlenbach, which is the location of our production facility. Wherever it is possible, we prioritize local suppliers to fulfill our needs.

## 3.4. Water

The manufacturing of our tubing get creates high temperatures and therefore constant cooling is to be applied. Hence, the vast majority of our water consumption (95%) arises during the production itself. A huge reduction in the water and energy needs could be achieved through a closed cooling water cycle. This cycle gets almost exclusively fed by process water, whereby a high consumption of freshwater is obviated. The cistern belonging to the firm saves a considerable amount of freshwater as well.

## 3.5 Reconstruction

Sustainability is one of the most important parts of our strategy. Thus, the project list to optimize our process as well as production facilities is long. In the near future, the complete renovation of our heating system on the entire company premises is planned. A plan accompanied by huge costs time and energy efforts. Tubing waste that occurs during production is almost 100% recycled. A part is processed in-house with the help of a granulator. The other part is given to a recycling company and gets regranulated. The raw material which gets regained internally then flows back into the manufacturing process. The material savings are currently only in the single-digit percentage range. The next goal of PAPUREX is savings in the double-digit percentage range.

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## 4. Environmental program - Figures

Energy Efficiency	Annual Energy Consumption: 540.437 kWh Proportion of self-generated solar energy: 10.800 kWh Annual grid-feed out of solar energy: 1390 kWh Annual CO <sub>2</sub> -Saving due to solar energy: 13,2t Proportion of green energy of entire consumption (Electricity and warmth): 100%	
Water	Annual freshwater consumption: 1005 m <sup>3</sup>	
Waste	Annual waste generation:	
	Residual waste	17,04 m <sup>3</sup>
	Paper and cardboard	18,72 m <sup>3</sup>
	Plastics (nearly 100% recycled)	18.560 t
	Hazardous substances	0,07 m <sup>3</sup>
Heating oil	Annual heating oil consumption: approx.7800 Liters	

A further measure of PAPUREX to reduce the emission of greenhouse gases is the optimized procurement logistics. Compared to earlier ordering patterns for raw material, approximately 20 Truck trips can be obviated annually. Projected to the transport route, this equals an annual CO<sub>2</sub> saving of 7,5 tons. Additionally, we attach importance to the usage of electric vehicles as company cars. At the moment, there are two hybrids and one fully electric car in the company fleet. Projected to the cumulated annual driving distance of 57.00km, this equals a further CO<sub>2</sub> saving of 5 tons.



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## 5. Certificates

In 2020, PAPUREX has voluntarily undergone an energy audit by EKON-institute. The goal was to spot additional potential for energy savings and thus, relieve the environment additionally.



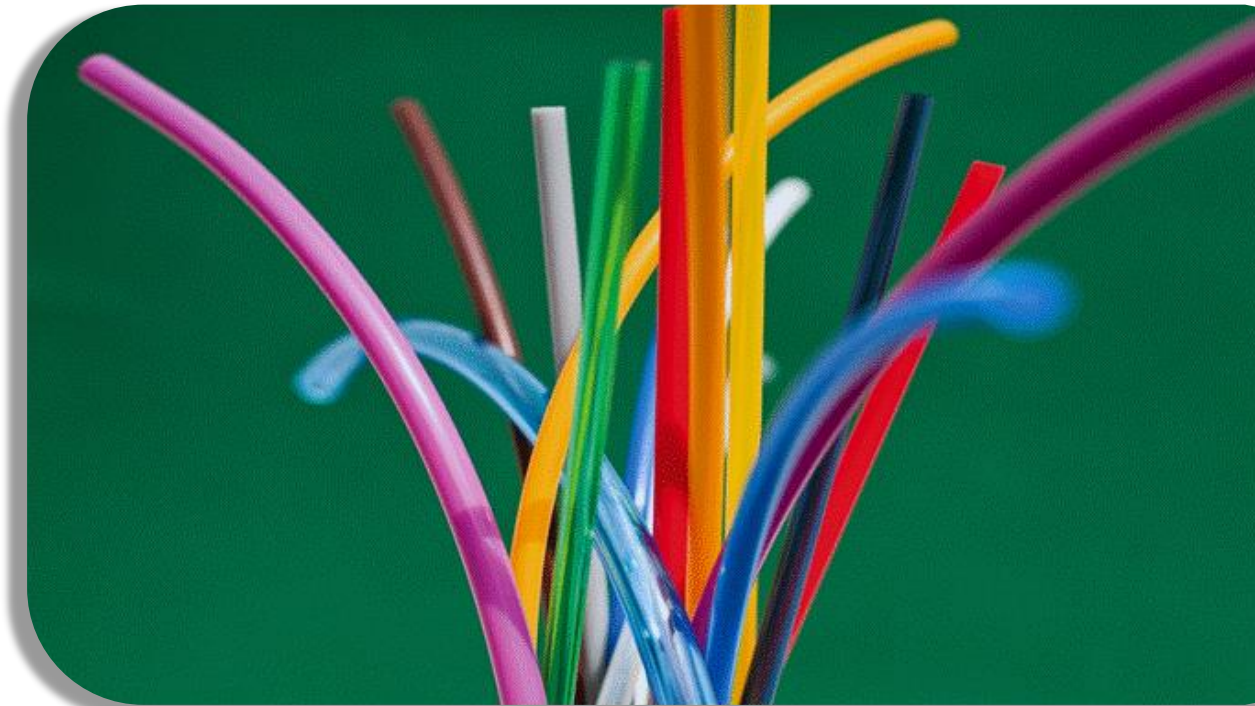
For 17 years already PAPUREX spares the environment via referencing green energy and supporting projects for the development of sustainability around the whole globe.

## 6. Forecast / Goal

Striving for quality and constant improvement is rooted deeply in the company philosophy of PAPUREX. Thus, we are not satisfied with our achievements in the area of environmental protection yet.

The plan is to further electrify the company fleet avoiding combustion engines and furthering E-bikes as well as electric cars. Furthermore, the complete renovation of the heating system will contribute to improving our environmental footprint. The already introduced recycling of production waste offers additional potential to save resources and is one of our primary focuses for the next years. The same applies to the collaboration with our local partners.

All these plans are combined to a subordinate target position: Through the further optimization of our emission saving and additional compensation via aiding projects supporting the development of sustainability, PAPUREX has the target to achieve CO2 neutrality until 2025.



## Imprint



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