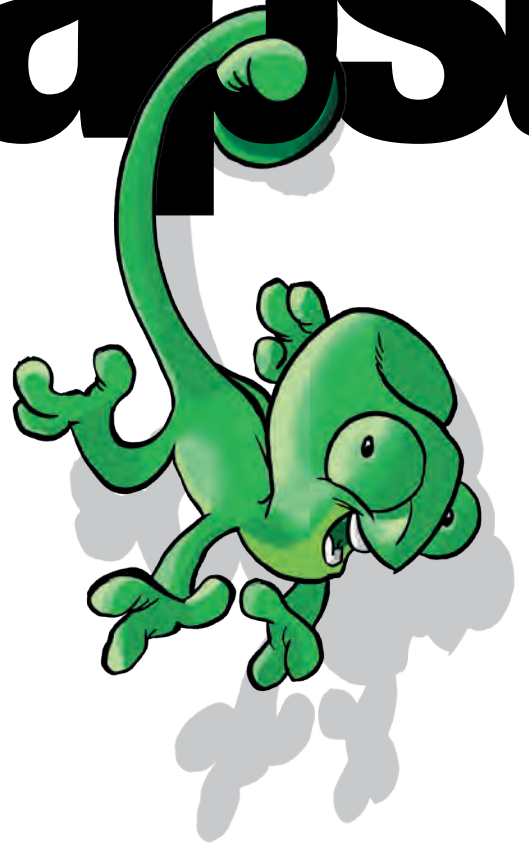


ebm-papst



**Our
commitment
to a
cleaner future**





Every day is a
GREEN DAY
ebmpapst

We are serious about our environmental strategy

GreenTech travels around the globe

For us, every day is a green day – worldwide

Our corporate philosophy is touring the world. With 57 locations altogether and more than 11,000 employees, we are represented all over the globe. We are serious about our environmental and sustainability strategy. This year many of our subsidiaries are demonstrating that they do things “green” for this reason. This is why we are running our “Every Day is a GreenDay” campaign. Every seven days, there will be a promotional week at a different ebm-papst location highlighting environmental protection, sustainability, and energy and resource efficiency.



The kick-off is taking place on April 16th at our corporate headquarters in Mulfingen with a visit from the Minister of the Environment for the German state of Baden-Württemberg, Franz Untersteller.

The next day, scientific journalist Ranga Yogeshwar, politician Rezzo Schlauch, environmental economist Christopher Boyd and climate researcher Hans von Storch are having a discussion on the topic “Ecology: a growth driver?” The discussion is taking place during an evening event at the Stauseehalle in Mulfingen. Our cafeterias will begin the campaign by offering an additional meal made exclusively of ingredients from regional suppliers. Experts will offer our employees an energy consultation free of charge, employees can take our electric company car for a test drive and the “energy scouts” will explain their job. ebm-papst Austria will take up the campaign standard from Mulfingen. Italy, St. Georgen in the German Black Forest, Belarus, Greece,

and others will follow – a trip around the entire world! The centre point is always the objective of awakening the enthusiasm of our employees, customers and the public about environmental protection and sustainability and to show why GreenTech has become a success factor for ebm-papst.

There are also a number of event ideas. Our Italian employees are distributing cloth bags, for example. The employees from the Korean subsidiary are bypassing the lift for two days and taking the stairs instead; the Austrians are biking to work, and ebm-papst Brazil is planting a tree for every GreenTech EC fan sold in the current fiscal year. ○

ebm-papst Brazil is planting a tree for every GreenTech EC fan sold



Environmental awareness begins at home

GreenTech is more than just a logo. It represents the conviction we live by every day!

As the technological leader in the area of air technology and drive engineering, energy efficiency and resource conservation are at the top of our agenda. And this is not because it's “in” to be green right now; we were doing it from the start. Company founder Gerhard Sturm specified that each new product has to surpass its predecessor – both economically and environmentally. Because

if the product uses less energy, the user has to pay less – this was and is a good sales point. Thus an environmentally conscious attitude is not busy work for ebm-papst, but rather an economical matter of course. We have a name for our conviction: GreenTech.

Without exaggeration, we can claim that we are always a large step ahead in terms of efficiency. We established the basis for this with our GreenTech EC fans. This basis comes from what are referred to as “non-commutator DC motors.” They have many advantages – first and foremost, they have tremendously high efficiency and thus save substantially more energy than conventional electric motors. A small example calculation goes to show how much more energy-saving they can be: If all European industry only used fans with our GreenTech EC technology for cooling, ventilating and air-conditioning, four coal-fired power plants could be eliminated from the electrical network. CO₂ emissions would be lowered by 16 million tonnes annually in one go.

We are also setting milestones in heating. We are working together with market leaders in gas condensing boiler technology and are providing for optimal combustion with products such as our LambdaConstant blower system. But our commitment does not stop at efficiency. We are also promoting resource conservation in several ways. Hybrid designs are a prime example of these efforts. For example, we are focussing on hybrid designs, including one consisting of an aluminium inlet with fan blades made from a high-performance plastic – referred to as the HyBlade®. These new materials are easier to mould and demonstrate significantly improved environmental performance. Thus by producing 100,000 HyBlade® fans, for instance, we are saving 9,000 megawatt-hours – an annual power consumption equivalent to 3,000 households. We have also set an ambitious goal for ourselves: replacing a total of 15 percent of the plastics we use with sustainable biomaterials by 2015. The material “epylene” that we developed in-house consists of up to 50 percent wood from sustainably forested, domestic forests. It is used in the energy-saving motor (ESM) installed in large numbers of supermarket refrigerated display cases. An initial step towards eliminating dependency on crude oil. Because here too, the maxim holds true: Less energy consumed is the cleanest form of energy. ○

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“GreenTech is the ultimate expression of our corporate philosophy about sustainability.”

Hans-Jochen Beilke, Chairman of the Board of Managing Directors of the ebm-papst Group



HyBlade® axial fan



ESM fans with a wall ring of epylene®



ECI motor

Our efficiency “hits”: Innovations from ebm-papst



RadiCal® centrifugal fan



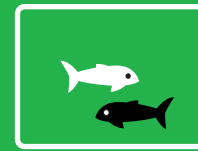
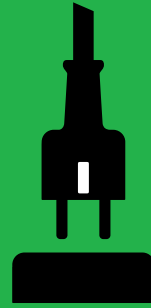
LambdaConstant gas blower



Take a shower instead: Bathing in a full bathtub uses three times as much water and energy as taking a shower. Using a water-saving shower head saves **33,000 litres of water** per person and year!

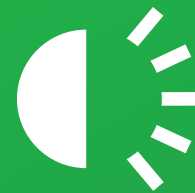
- 33 m³

Pull the plug: Devices in stand-by mode cause more than five billion dollar of unnecessary costs in Germany each year. Per household, this is about **ten percent of a normal energy bill**. By connecting televisions, stereo systems and the like to power strips or timers, power is only consumed if the devices are in use.



15 %

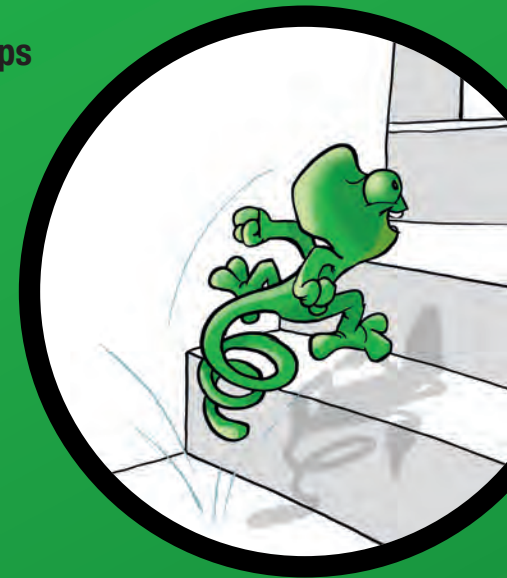
Not too colourful: Screen savers with a lot of colourful animations are certainly more entertaining, but a black and white version would use **15 percent less energy!**



Last one out hit the lights! After meetings be sure to hit the switch so that the lights and projectors are not on when no one is in the room.

- 50 kWh

Taking the stairs keeps you fit — and saves energy: Taking a lift twice per day consumes **about 50 kilowatt-hours**.



This is how YOU protect the environment!



Everyone can save energy. And it is often the small things that lead to measurable results. Play your part!

Windows wide open instead of cracked open: In winter, rooms should be provided with **fresh air** two to three times daily by opening the windows wide for **five minutes**. Constantly airing out a room with the window just open a crack causes **energy costs** of up to **250 dollar** per year and is often a cause of mould growth. **By the way:** Our fans make controlled home ventilation **highly efficient**.



20 s — OFF

Cut the engine while stopped: It is worthwhile to switch off your car engine if you are stopped for as little as 20 seconds. A driver that travels 15,000 kilometres per year would **save 70 dollar** doing this.



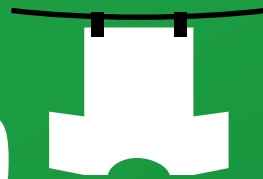
Getting rid of incandescent lamps: The average home saves **63 to 229 dollar** using energy saving lamps.



Together is cheaper: 360 dollar that is how much each member of a **carpool** saves travelling five kilometres to and from work.

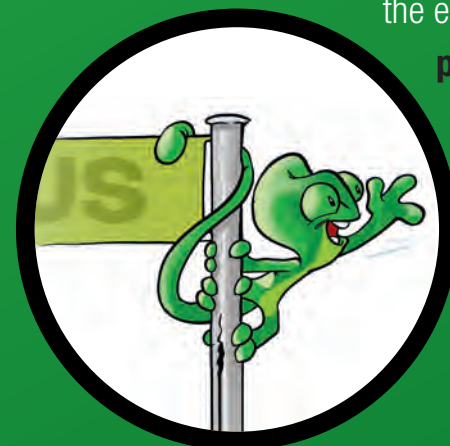


- 480 kWh



Lines instead of dryers: If a four-person household stops using a clothes dryer, they save 480 kilowatt-hours of electricity or about **150 dollar in a year**.

Switch transportation: Public transport is the first choice! **Riding our ebm-papst company bus lines helps conserve the environment and helps prevent frayed nerves.**



Better insulation:

- 70 %

An uninsulated single-family home gives off about two thirds of its heat as waste. Better insulation in the exterior walls, the attic and the basement as well as well-insulated windows can save **up to 70 percent of the heat energy!**

2x

Get up and ride: Leave your car at home if you are just going a short distance! **Riding your bike twice per week** instead of having your engine roar to life saves 75 dollar in a year.

LOOKING FOR WASTE

The “energy scouts” trainee project helps with savings

We teach our young staff the importance of protecting the environment and saving energy, even during their training. This is why a group of dedicated trainees has been wandering through the factory buildings since 2010 equipped with a case full of highly sensitive instruments. Using a thermal imaging camera, these “energy scouts” find inefficient motors that generate too much heat. A leak measuring instrument is used to find tiny leaks in the compressed air line network. Each discovered hole is worth it. Just a millimetre-sized hole, at a pressure of seven

bars, results in wasted energy totalling 360 dollar in a year. Overall, the energy scouts were able to save more than 130,000 dollar in their first year.

The project is well received among the trainees, as project supervisor Lisa Bahr confirmed: “I think it’s great that our company puts so much effort into the environment.” This is made readily apparent in her daily life, as well. “We also benefit from our knowledge outside the company, too.” The trainees particularly enjoy the fact that they largely have free reign in the project. Thus they learn early on to organise and make decisions in a self-

directed manner. They examine processes independently and deal with the Technical Operations Manager.

Award-winning dedication: The energy scouts are among the winners of this year’s “365 Landmarks in the Land of Ideas” competition where excellent projects for the future viability of Germany are given awards. ○



This generated the idea for ebm-papst GreenDay. Our trainees report on video

Trainees learn about energy saving early on

THE GREEN FACTORY

Our plant in Hollenbach sets standards in terms of energy efficiency

Our new plant in Hollenbach for manufacturing large fans is only a few kilometres from the headquarters in Mulfingen. In a green field. It really fits there. This is because the “green” factory is setting benchmarks for energy efficiency due to intelligent building design and state-of-the-art technology.

The plant only consumes one-tenth of the maximum energy permitted by law. This means we are significantly surpassing the legal energy saving requirements for new buildings. If the factory in Hollenbach were an average German car, it would travel 100 kilome-

tres on just 0.75 litres of petrol. If you were the plant, four small meals would be enough to keep you going — four meals per week.

How do we do it? With well thought-out planning. The plant uses the heat generated by production to heat the cooler areas of the 13,500 square meter facility, such as the warehouse and the shipping office. We even use the fire extinguishing water as a heat accumulator. All of the heat given off by all of the facilities and processes is collected in a water tank that holds more than one million litres. In terms of cooling and

ventilation, we have the home field advantage — our energy saving fans are, of course, working in our own facilities, too. In addition, there is the photovoltaic system on the roof. The output can reach up to 153 kilowatt-hours of electricity. Overall, we spare the environment more than 390 tonnes of CO₂ per year with the plant. The building design is so successful that other companies are using the factory in Hollenbach as a model. ○

We save 390 tonnes of CO₂ — per year

This is how WE protect the environment!



01 Well thought-out heat distribution saves energy
 02 Fire extinguishing water as a heat accumulator
 03 Waste sorting in manufacturing – a given 04 Iron phosphating makes 30 hazardous substances obsolete
 05 Out and about with a mission to save: The energy scouts
 06 The everyday shuttle bus saves countless litres of fuel
 07 Producing electricity independently – with photovoltaics on the plant roof 08 Our green plant in a green field: Hollenbach 09 We reuse the powder for coating
 10 We route hot air from production to cooler areas



PUTTING “EFFICIENT” ON ITS FEET

Our products are sustainable. Their manufacturing process is too

Intelligent business practices with maximum energy efficiency — that is our principle. This began when our employees started coming to work by bus, which has been happening since the 1960s. This example has been followed, even in the Far East. Now there is even a bus service at

ebm-papst Shanghai. This saves countless litres of fuel each day. The least possible amount of harmful emissions is a deciding factor when buying company cars. Sustainability is a given for us when we develop new products and technologies. Even in the design phase, we ensure that our materials are

environmentally friendly and recyclable. Energy efficiency is paramount in production: For instance, our St. Georgen location in Germany’s Black Forest helped find a way for our power-hungry service life test cabinets to save energy. We no longer cool them with electricity. Instead we use a circuit that uses

the plant’s firefighting water reservoir. And we route the heat given off by the cabinets into the heating for the main administration building. Energy and heating oil are saved — two birds with one stone! In Mulfingen we are working with an ultra-thin layer powder

coating facility with almost zero emissions. The powder that does not stick to the workpiece is completely recycled and reused. In addition, the heat given off by this system is used to dry the parts — an ingenious little system. Another example: We have

switched from zinc phosphating to iron phosphating for the surface treatment. This allows us to do

without 30 hazardous substances and generates two-thirds less wastewater. Safer for our employees, better for the environment. This continues even once our products are finished. Specifically, we pack them in space-saving, reusable, recyclable packing. Well thought-out supply routes are another element in our sustainable approach. At ebm-papst, lorries do not drive around without a reason or without a load. ○

Energy efficiency and cost-effectiveness belong together

Every day is a GREEN DAY

ebmpapst



// April 16–20, 2012 **Mulfingen, Germany** // April 23–27 **Austria** // April 30–May 6 **Italy** // May 14–18 **Belarus** // May 21–25 **Greece** // May 28–June 1 **Czech Republic** // June 4–8 **Denmark** // June 11–15 **USA** // June 18–22 **Spain** // June 25–29 **Landshut, Germany** // July 2–6 **Poland** // July 9–13 **Japan** // July 16–20 **St. Georgen, Germany** // July 16–20 **Great Britain – Auto & Drives** // July 23–27 **Great Britain** // July 30–August 4 **South Africa** // August 20–24 **Norway** // August 27–31 **Argentina** // September 3–7 **Finland** // September 10–14 **Ukraine** // September 17–21 **Russia** // September 24–28 **China** // October 1–6 **Brazil** // October 15–19 **Switzerland** // October 21–26 **Australia** // October 29–November 2 **Portugal** // November 5–9 **Benelux** // November 12–17 **Dubai** // November 19–23 **Turkey** // November 26–December 2 **Sweden** // December 3–7 **Romania** // January 14–18, 2013 **Hungary** // March 4–8, 2013 **France** // March 11–15, 2013 **Korea**

www.greenday.ebmpapst.com

Mulfingen, Germany April 16 – 20, 2012
Minister Day: Minister of the Environment for the German state of Baden-Württemberg, Franz Untersteller, visits ebm-papst **Debate Day:** “Ecology as a growth driver?” panel discussion **Mobility Day:** Employees test the company’s new electric car.



Seoul, South Korea
 March 11 – 15, 2013
Donation Day: Environmental organisations get financial support **Zero Waste Day:** Employees do without disposable products of any type **Stairs Day:** The lifts are stopped – use the stairs!

São Paulo, Brazil
 October 1 – 6, 2012
Recycling Day: Each employee recycles any excess paper **Nature Day:** A tree is planted for each GreenTech EC fan sold **Children’s Day:** Children of employees learn about the GreenTech philosophy.



Mozzate, Italy
 April 30 – May 3, 2012
Gardening Day: Employees plant a vegetable garden on the company grounds **Cloth Bag Day:** Distribution of cloth bags **Children’s Day:** Environmental protection for the little ones in kindergarten.



*GreenDay travels
around the world!*

The ebm-papst Group is the world’s leading manufacturer of fans and motors and is a pioneer and pacesetter for ultra-efficient GreenTech EC technology. In the 2010/2011 fiscal year, the company achieved a turnover of 1.697 billion dollar. ebm-papst employs more than 11,000 employees at 17 production facilities (including those in

Germany, China and the USA) and 57 sales offices world-wide. Products of the global market leader are represented in many industries, such as ventilation, air-conditioning and refrigeration technology, household appliances, heating engineering, in IT and telecommunications applications and in automotive and commercial vehicles engineering.

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