


PIPELIFE *inside*

Sustainability & CSR

September 2013



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Editorial

Our Management holding on strong...

Usually, business performance and financial profitability determine the success of a company.

This is also certainly true in case of Pipelife. But, the members of the Pipelife Management Committee, as well as the local management in every Pipelife company, are also dedicated and committed to the protection of our environment, sustainability and corporate social responsibility. As a successful company, we want to give something back to the environment and the society in selected projects, without counting every Eurocent.

Such commitment is reflected in various environmental and CSR projects, like for example the still ongoing project 27-27-27 (see more details on the activities of the previous months in this newsletter), or Pipelife's most recent involvement with "Habitat for Humanity" in Bulgaria, where we are supporting – together with Wienerberger and Tondach - the construction of houses for selected underprivileged people.

For this we provide piping products for Sewerage, Drainage and the areas of Hot & Cold and Soil. To ensure proper installation of the products, we also give consultancy services as well as educational support. On top, we also contribute financially to ensure the organizational framework for this construction project.

As this project has just started, a more detailed report will be published in the next edition of this newsletter.

... not only onto a tree, but on our environmental commitment!



Electrical cars used at 2013 Annual Conference

From June 5th to 7th, the 2013 Annual Conference was held in Tallinn / Estonia.

As environmental protection ranks high on the agenda of Pipelife Estonia, it was clear for them to arrange the most environmental friendly means of transportation for the participants. As due to the distance travelling by bicycle was not an option, our colleagues from Estonia were searching for an alternative zero emission method of transportation.

And the solution was actually close to hand: in cooperation with KredEx, the Annual Conference participants were picked up at the airport with electric cars from type "Nissan Leaf".

For most of the participants it was their first experience with an electrical car and the feedback was unanimously positive. The smooth movement and especially the pleasant silence of the cars impressed most of the passengers.

In Estonia, this means of transport is highly appreciated and supported by the government. Today there are about 600 electric cars registered in Estonia. Right now there are about 160 charging stations and thanks to a country-wide infrastructure project, the number should increase up to 12.000 by the year 2020. A regular half-hour commute from a suburb to the Tallinn city center costs only around 0.30 EUR at today's electricity prices.

Zero emission method of transportation



Wienerberger awarded Prime Status by Oekom Reserach

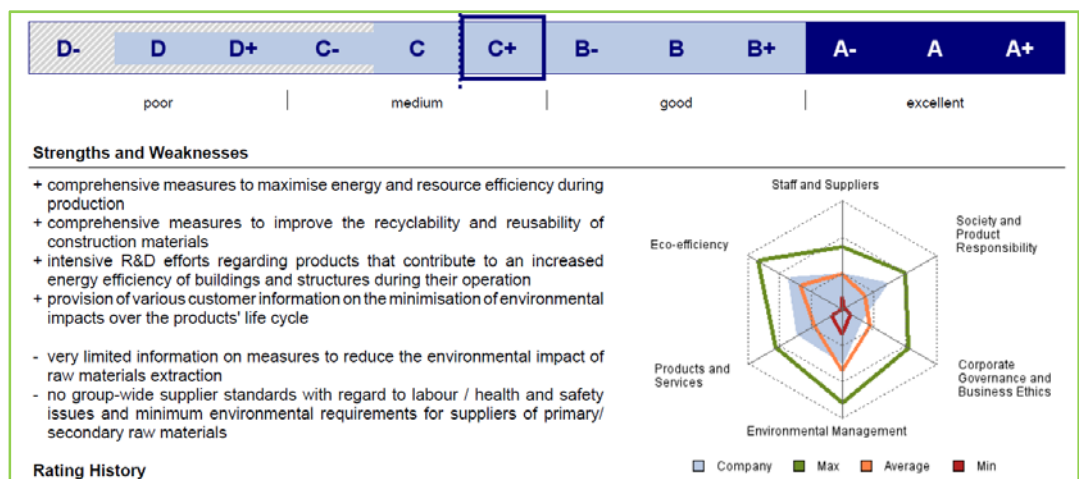
Oekom-Research: sustainability rating company

Oekom research AG (http://www.oekom-research.com/index_en.php) is one of the world's leading rating agencies and provides the crucial head start in the segment of sustainable investments. Being the partner of institutional investors and financial service providers, they develop innovative investment strategies that combine sustainability research with a high rate of return.

The sustainability research covers share and bond issuers (companies, countries and supra-national institutions). When evaluating securities, they place a strong emphasis on quality, independence and transparency.

In 2013, for the first time, Wienerberger participated in their rating procedure and reached grade C after some negotiations and after a lot of material that has been provided to them. Grade C is already a quite good rating for the construction materials sector and is absolutely in line with the ratings of Wienerberger's large competitors like Imerys, CRH or Heidelberg.

Now – after the publication of Wienerberger's new sustainability report 2012 – they have been informed that they have been upgraded to grade C+, which results in the fact that Wienerberger now has the so-called "Prime" status. "Prime" status indicates that Wienerberger is now amongst the top recommendations for sustainable investors and it is quite likely that due to that Wienerberger will find some new investors for their shares.



On our Intranet in the Sustainability/CSR section you can find the final Wienerberger rating report for additional information. As you can see there are many indicators where Wienerberger already has a very good performance, but there are also others where still some work needs to be done.

Why are plastic pipes green?

Sustainability, less environmental impact

Plastic pipes provide a sustainable and safe way to distribute valuable drinking water, provide modern sewer systems and are also used in a lot of other applications. Their environmental contribution to public health and sanitation is unique. Moreover, their long service life followed by recycling, guarantees a high level of sustainability for hundreds of years. New applications in the field of rainwater harvesting and management, storm water drainage, domestic grey water systems, district heating and domestic geothermal technology are also helping to create a more sustainable world.

Less Leakage, less environmental impact

Plastic pipe systems are an excellent solution for distributing drinking water and for sewer systems. Transporting liquids or gases from one place to another is the main task of a pipe system. Along the way, the pipe system must protect the contents from loss, through leakage inside out. It must also protect the contents from leakage outside in. Plastic piping systems are designed in such a way that leaking of joints is very unlikely, which results in a positive contribution to the environment. Due to its flexibility, the pipes can withstand movements in the ground that might cause non-plastic pipe materials to break.

Less Energy, less environmental impact

Rising energy prices and growing awareness of the need to reduce greenhouse gas emissions are making energy-efficiency a key parameter when politicians, companies, organizations and people make decisions for the future. Pipe systems are no exception and plastic pipes stand out as the most energy efficient choice for a wide range of applications: Plastic pipes are energy efficient. Many more meters of pipe can be made from one kilo of plastic than any other pipe material. Their low weight means less energy in transport, handling and installation. Pipes are energy neutral during use. However, plastic pipes are energy positive at end of life phase since they can be recycled.

Building Infrastructure

Plastic was invented more than 150 years ago and became a popular material for pipe systems during the 1950's. During the past decades and as the many benefits offered by plastic pipes became known, their applications proliferated. Over the last 50 years, plastic pipes have gained popularity and are today the preferred material in many countries. Today, Plastic Pipe Systems are very essential in building up Infrastructure - in private Housing as well as in public infrastructure. Plastic Pipe Systems make life convenient and sanitary. Transport of Energy, water supply and water disposal are the main of human necessities.

Durability

A projected life span of 50 to 100 years makes plastic pipe systems a very long lasting solution. Plastic pipe systems are the ultimate when it comes to durability. They do not corrode and they are resistant to lot of chemicals. Their inherent flexibility means that they are more able to accommodate ground movement without cracking or breaking. Furthermore, unlike most other materials, they will perform leak-free even under extreme conditions.

Light and Easy

Plastic pipes are generally lighter than other pipe materials. Clearly, lower transport and manpower costs are convincing arguments for their use. And the unit cost of pipes is generally only a small fraction of the total installation costs. Lightweight also means they are easier to handle and install. For some sizes of buried pipes for drainage or sewer, it requires only one person to handle, position and achieve jointing. Mechanical lifting is only likely to be necessary for the larger diameter pipes.

Energy Recovery

Most plastics have a high-energy content. If for some reason recycling is not an option, then used plastic pipes present an excellent source of energy. At the end of their service life, plastic pipes may therefore be collected and fed into an energy recovery plant. Valuable energy may thus be released for heating purposes or generating electricity.

Low Emissions of Greenhouse Gases

When it comes to the emission of greenhouse gases (GHG), plastic offers an environmentally attractive alternative to other piping materials. The only greenhouse gas emissions involved in pipe production are those relating to energy use in the manufacturing process.

Recycling and Recovery

Plastic pipe systems can be recycled. Collection and recycling schemes have thus been set up in many European countries. The material processed can be used to make new pipes. The European Plastic Pipes and Fittings Association (TEPPFA), of which Pipelife is a member, has made a commitment to recycle available collectable pipe and fittings waste.

Recycling for the Future

The long lifetime of plastic pipes means that the volumes available for recycling are rather small. Recycling is therefore rather costly. However, as volumes are expected to rise in the future, the plastic pipe manufacturers have decided to invest in setting up and running the recycling schemes. Having recycling schemes in working order now will benefit generations in the future

Health

Plastic pipe systems ensure the transportation of clean drinking water. In every aspect of this involvement and responsibility, the question of health is of prime importance. Clean drinking water is a vital and scarce resource requiring the best protection on its journey from source to the consumer. Over the last 50 years, plastic pipes have gained popularity and are today the preferred material for drinking water supply in many countries. Plastic pipe systems used for the supply and distribution of drinking water are mostly made from PVC, C-PVC, PE, PP, PB, PEX and PE-RT.

To qualify for use with drinking water supply and distribution, all plastic piping systems, need to comply with very strict and legal requirements. These requirements are stringent and relate to human health criteria. Detailed assessment procedures are also applied. Conclusions from long term experience and the application of modern analytical techniques testing are clear. Legally approved plastic pipes do not negatively affect the quality of drinking water and thus contribute strongly to its safe supply for human consumption.

New record of over 360.000 tons of PVC recycled in Europe

VinylPlus, the European PVC industry sustainable development program, of which Pipelife is an active member for many years, had a record 362,076 tons of PVC recycled in 2012, keeping it on track to meet the challenge of recycling 800,000 tons per year by 2020. A more comprehensive and wider scope for what constitutes 'recycled PVC' has been adopted to include post-consumer and limited types of post-industrial PVC, as well as some of the regulated waste streams in the EU.



The 2012 results were presented at the Vinyl Sustainability Forum 2013 in Istanbul. Echoing words from the EU Environment Commissioner, VinylPlus Chairman Filipe Constant said the industry "is effectively moving from a model of resource consumption that follows a 'take-make-use-throw away' linear pattern into a truly circular economy model which puts end-of-life materials back into the production stream extending the added-value of PVC's inherent durability and versatility."

In 2012 VinylPlus registered a decrease of 76.37% in lead stabilizer consumption in the EU-27 compared to 2007 levels, well on track to complete the substitution by the end of 2015. The new audit on the 'PVC Industry Charters' showed a 96% full compliance.

Decrease of lead stabilizers

A number of VinylPlus taskforces are fully operational, studying how to incorporate renewable energy and raw materials, the sustainable use of additives and the environmental footprint of PVC production. A VinylPlus product label concept for PVC products has been developed in collaboration with The Natural Step—an NGO providing input and guidance for the development of the VinylPlus program — and the UK expert certification body BRE.

"It is quite impressive to see such a dynamic value-chain working together to make the entire industry and its products more sustainable," commented Reha Gür, Vice-President, Turkish Plastics Manufacturers Association, PAGDER. "As most of Europe and the world are experiencing difficult economic times, this is even more admirable. We are honored to host the Vinyl Sustainability Forum in Istanbul and hope the work of VinylPlus can help inspiring our country's PVC companies - large and small - to move a step closer to the principles and goals behind this program."

An important focus of the VinylPlus program is the promotion of 'sustainability awareness'. In that regard, a number of communication projects were supported last year to reinforce the Voluntary Commitment messages along the value chain. VinylPlus also engaged in external debates including Rio+20, the United Nations Conference on Sustainable Development. The VinylPlus Voluntary Commitment was included in the Rio+20 Registry of Commitments.

Sustainability awareness

Speaking at the Forum in Istanbul, Ambassador Tomas Anker Christensen, Senior Advisor at the United Nations Office for Partnerships noted "partnerships are a key enabler for achieving progress on agreed development goals, including sustainable development. VinylPlus has demonstrated success and we are keen to see how the European industry challenges itself to be more ambitious and concrete in addressing identified challenges. Industry has a critical role to play in accelerating change, greening the economy and driving sustainable progress around the world".

Pipeline Austria supports graduates of technical school

With its competition, Pipeline Austria supports HTL (technical school) school graduates and high school graduates who show outstanding engagement for environment and sustainability in their thesis paper.

The competition has been held since 1999, and by now already around 450 graduates participated and presented great projects that were dedicated to different aspects of environment and sustainability. In June, this year's award ceremony has been held in the Pipeline training center in Wiener Neudorf.

The thesis awarded first place dealt with the problem of recurring floodings in a small village in Austria due to under-capacity of the river to discharge the water during strong rainfall, resulting in heavy erosion of the river banks. The aim of the study was to determine the maximum water level line in the event of a flood with the help of computer-aided calculation models and to derive the drag force calculating the resulting erosion of the river banks. Furthermore, both an ecological and a botanical inventory have been drawn up. Based on the elaborated problems, solutions and suggestions for improvement have also been provided.

The second placed thesis has the title "Biking in Krems: Analysis - future scenarios - planning" and deals with sustainable mobility management. In this paper, comprehensive economically, technically and socially acceptable solutions to increase the share of cycling in the city of Krems have been effectively elaborated.

As a novum, two ideas ranked 3rd. The one thesis covers concepts for "industrial use of waste heat" for a company in Italy. In the three concepts that have been presented, the project team did not only overcome extensive technical challenges, but also determined the cost and respective CO₂ savings. The other thesis, called „Online Assessment of Suppliers“, dealt with the topic of sustainable supplier relationship within Pipeline Austria. Target was to develop an online tool for the assessment of supplier relations, accessible for the Pipeline employees including evaluation of the entered data.



Making use of TEPPFA EPDs

Sometimes the advantage of the TEPPFA Environmental Product Declarations (EPDs) is questioned and people are not fully aware of the benefits these research results can bring. But, as below example from The Netherlands shows, the outcome of the EPDs can even result in the change of mindset.

Prof. Dr. ir Michiel Haas, owner of the "Nederlands Instituut voor Bouwbiologie en Ecologie" (Institute for sustainable construction and ecology - <http://www.nibe.org>), for years has been criticizing PVC as not being environmentally friendly and harmful to our planet. As Prof. Haas is a well-recognized expert in the field of construction ecology in the Netherlands, his word has emphasis and people listen to him. And certainly his publicized opinion on PVC was not favorable for our industry, esp. in the Netherlands, where PVC is still the predominant plastic pipe material.

But the results of the EPDs, especially the good performance of PVC in terms of emissions over traditional materials such as ductile iron or concrete, gave the Dutch plastic pipes industry arguments to convince Prof. Haas that his long promoted opinion might need to be revised.

And, in fact, after Prof. Haas has been introduced to the TEPPFA EPDs and has analyzed the according results, he was ready to change his opinion. Based on facts & figures of the EPDs, Prof. Haas openly admitted that he has been not fully correct in the past years and even granted the DUBOkeur certificate to PVC pipe systems in the area of Drainage and Sewerage.



Prof. Haas granting the certificate to Roger Loop, director of the Dutch national pipe association "Bureauleiding".



The DUBOkeur® product certificate was brought to life in 2004 so that products could be distinguished in the field of sustainability. For this, the environmental impact of the product is evaluated by means of a life cycle analysis (LCA) and put in relation to similar products. Only the most environmentally friendly alternatives are eligible for certification. At present there are more than 170 products bearing the DUBOkeur® product label!

To remind you, the following TEPPFA EPDs exist already

- PVC Soil
- PP Soil
- PE Water Pressure
- PVC – U Water Pressure
- PVC – O; MRS 31,5 MPa Water Pressure
- PVC – O; MRS 45 MPa Water Pressure
- PVC compact Sewerage
- PVC COEX foamed Sewerage
- PVC COEX foamed with recyclates Sewerage
- PP corrugated DW Sewerage
- Pex Hot&Cold
- Polymer / AI / Polymer Hot&Cold

Currently under preparation:

- PVC / PP Silent Soil system
- PVC-U rain gutters
- PE Gas
- PP compact Sewerage
- PP structured wall Sewerage
- PP-R Hot & Cold

News from ATI

27-27-27 Pipelife around the world

Update on "Pipelife around the world" project

After successfully initiating all the 2012 country projects, also for 2013 very interesting projects have been selected together with the Red Cross:

May 2013, Serbia: National teams for emergency response

Within the past two years Red Cross of Serbia has formed and educated two National teams for emergency response in case of extreme winter conditions and floods. The tasks of these teams are to conduct the evacuation, distribute humanitarian aid and treat the population who were affected by disaster, and to provide supporting role to the official government services in case of emergency situations. Experience of these teams shows that their reaction in the past would have been more effective if they had radio communication devices between team members, as well with the official government services who are coordinating the services in case of emergency.

Procurement of radio communication devices with the support of the Pipelife Group will enable the trained Serbian Red Cross volunteers in these teams to be more efficient, operative and helpful in the field.

June 2013, USA: Support for Oklahoma after the tornadoes

Year after year, Oklahoma faces severe storms and tornadoes, and the Red Cross remains steadfast in providing warmth, comfort and support to its residents. Therefore Pipelife chose to support the American Red Cross in the month of June.

Since tornadoes and severe storms hit Oklahoma on May 19th, May 20th and again on May 31st, more than 1,600 American Red Cross workers are helping people get back on their feet – providing shelter, food, relief supplies, health services and emotional comfort. Additionally, the Red Cross is planning for recovery over the long-term. As of June 11, 2013 the Red Cross has served more than 416,000 meals and snacks; distributed more than 378,000 relief items; facilitated nearly 1,500 Safe and Well registrations; and provided more than 17,700 health services and mental health contacts. As families and communities come to terms with the devastating impacts of these storms, the Red Cross remains an enduring symbol of hope by providing support and comfort to residents affected by both sets of severe weather.

July 2013, Belgium: Vacation for socially vulnerable children

During school holidays, all children go on vacation. At least, that is what most people think.

In Belgium (and in a lot more other countries) not every child has this opportunity. Most of those children live in poor families. They have financial difficulties, but they are also excluded from agreeable homes, good education, good health services, cultural activities and others.

For those children, Red Cross Flanders organizes summer camps. During these camps, play and fun are the most important! As the children encounter a lot of difficulties at home, they can count on as much personal attention as necessary from the volunteers. They encourage the children wherever needed, so that every child has a wonderful vacation.

More detailed information on all projects can be found on the pipelife.com webpage.

