



The Chemical Company

SD Update

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About this issue

The concept of sustainability is on everyone's lips, but it is nevertheless elusive for many people. How can sustainability be made more concrete and more tangible?

Sustainable development can be made visible at the regional level, for example through BASF receiving the certification of the European Water Stewardship (EWS) standard after Tarragona also for its Ludwigshafen site, thus advancing sustainable water management in

Germany. Also, BASF kept in touch with global stakeholders in the last quarter, such as expert discussions at the London School of Economics on stakeholder relations in the 21st century as well as at Sustainable Brands Conferences in Rio, Istanbul and San Diego.

Furthermore, many of our products contribute to sustainability, for example a new innovation from the Ultradur® product range that is registered for patent approval.

And a trusting partnership is a sign of sustainable commitment: the close co-operation between BASF and SINOPEC in China and with the Chambers of Industry and Commerce in the region around BASF's headquarters in Ludwigshafen. Read about these topics and more in this issue.

We hope you enjoy reading the new issue.

The editorial team



BASF attends conference at the London School of Economics

"If stakeholders ruled the world – Stakeholder relations in the 21st century" was the subject of an international conference at the London School of Economics. Company representatives discussed the meaning of stakeholders for corpo-

rate governance with participants from the fields of academia, politics and civil society. "Stakeholder relations should be on the agenda of every board meeting," said Mervyn E. King, former judge of the Supreme Court of South Africa and

Chairman of the International Integrated Reporting Council (IIRC), in his opening keynote speech.

As a panelist, Thorsten Pinkepank, Director Corporate Sustainability Relations BASF, discussed with participants from the Global Reporting Initiative (GRI) and from companies such as Allianz and ING. "For us it is important to know and understand the expectations of our stakeholders," said Pinkepank. "This is a crucial basis for establishing partnerships and for developing and shaping our sustainability management."



Thorsten Pinkepank and Mervyn E. King, Chairman of the International Integrated Reporting Council, discuss the importance of stakeholders for sustainability management.



Argan oil: Traditional knowledge and local expertise

Argan extracts are used in cosmetic applications because of their moisturizing, tightening and anti-aging properties. In Morocco, Argan oil production is traditionally run by women. Following its industrialization at the end of the nineties, a lot of women lost control of this production and the creation of added value. The Argan program set up by BASF and L'Oréal, along with the NGO Yamana, made a major contribution to putting the business back in women's hands and fostering corporate social responsibility in the entire argan supply chain. This is a voluntary contribution to the objectives of the Convention on Biological Diversity, and ensures a fair profit for producers and enables cooperatives to achieve economic indepen-

dence through the sustainable use of natural resources.

In 2008, together with L'Oréal, the former Laboratoires Sérobiologiques (LS) organization – which is now part of the cosmetic active ingredient business of BASF's Personal Care business – established a pioneering approach to sourcing sustainable argan oil.

“We wanted to take traditional knowledge and local expertise into consideration, so we set up a partnership with Zoubida Charrouf, a professor at Rabat's Mohamed V. University and founder of the women's Targanine cooperative network,” explains Florence Henry, Phytochemistry Leader of the

R&D Product Development Department, BASF Beauty Care Solutions France, located in Pulnoy.

The long-term goal was to combine scientific innovation, commercial development of the Argan sector in Morocco, and certain sustainability principles specific to the requirements of the region and the Argan supply chain. The Argan oil, and other Argan products are supplied through the Targanine network of cooperatives, which employs a mainly female workforce. Products are purchased specifically from Targanine cooperatives set up with the intention to empower previously unemployed Berber women and also to create shared ownership of the cooperative and shared decision making.



The fruit of the tree contains a very hard shell, holding between one and three kernels, from which a valuable oil can be extracted.



BASF and Sinopec inaugurate acrylic acid and SAP plants in Nanjing

BASF and Sinopec inaugurated two new plants for acrylic acid and superabsorbent polymers (SAP) at their state-of-the-art Verbund site, BASF-YPC Co., Ltd., a 50-50 joint venture in Nanjing, China at the beginning of April. Additionally, a new butyl acrylate plant will begin production later this year.

The new plants will serve the growing downstream demand. With an annual capacity of 60,000 metric tons, the new SAP plant will serve growing demand in China for baby diapers, adult incontinence products and feminine care products.

BASF's Verbund system creates efficient value chains that extend from basic chemicals right through to high-value-added products. In addition, the by-products of one plant can be used as the starting materials of another. At the BASF-YPC Verbund site in Nanjing, SAP, butyl acrylate and acrylic acid production will be backward integrated into the manufacturing of C3.

This ensures greater supply reliability, energy efficiency, and cost effectiveness, while minimizing energy use and environmental impact. Superabsorbent polymers have a high absorption



BASF and Sinopec operate the Verbund site BASF-YPC Co., Ltd., in Nanjing, China, a 50-50 joint venture.

capacity, which reduces the mass of hygiene products and helps saving pulp.



inge GmbH and Aquasource enter into long-term cooperation agreement

inge GmbH, a subsidiary of BASF SE and a world's leading supplier of ultrafiltration (UF) membranes, and Aquasource, a leading supplier of membrane systems, have agreed to enter into a strategic cooperation, with each company focusing on their respective competences. Aquasource will choose inge® patented Multi-bore® membranes for all types of water, where a UF in-to-out technology is suitable. In this configuration, feed water is introduced on the inside of seven bores and treated water (filtrate) is collected on the outside of the membrane fiber, allowing a uniform and efficient filtration through the membrane.

Within this cooperation, inge® will concentrate on the development and

production of UF membranes while Aquasource becomes a center of excellence for membrane systems. Both partners target to combine technologies to provide customers with even better solutions. Aquasource provides engineering, processes and applications and selects the best membrane technology for the customers' needs.

In the last two years BASF and inge® have jointly defined several R&D projects in order to drive forward innovation in UF membranes. This shows BASF's commitment to expand its membrane technology leadership and to become the leading supplier of chemistry-based solutions for the industrial and municipal water treatment.



The patented inge® Multi-bore® membranes with seven bores are used where a UF in-to-out technology is suitable.





BASF gives impulses for sustainability management

At the end of last year, BASF and the Chambers of Industry and Commerce Rhine-Neckar, Palatinate and Darmstadt invited other companies in the region to participate at a “CSR breakfast” hosted by BASF’s Visitor Center in Ludwigshafen. The event focused on how to integrate sustainability within corporate management.

Thorsten Pinkepank, Director Corporate Sustainability Relations BASF, gave an introduction into BASF’s sustainability understanding to the audience of about 80 guests. He explained how BASF balances economic success, social responsibility and environmental protection. “For us, sustainabil-

ity is both a responsibility and a business opportunity. In this way, we contribute to solutions for sustainable development,” said Pinkepank. Following-up, Thomas Schiller, team leader Donations, Sponsoring, Coordinator BASF Foundations, provided information about BASF’s social commitment in the Rhine-Neckar metropolitan region.

The series of CSR breakfasts organized by the Chambers of Industry and Commerce is specifically targeted at small and medium-sized enterprises. The participants get insights into different sustainability strategies and receive impulses for their own



The brochure about the Chambers of Industry and Commerce series of “CSR breakfasts”.

actions. A brochure that portrays the hosts over the last three years was published in May.



BASF showcases innovative plastics solutions for sustainability at Chinaplas 2014

BASF and its customers are innovating with plastics solutions in Asia Pacific to address the sustainability challenges. At Chinaplas 2014, BASF demonstrated solutions that help local and international companies compete in areas such as lightweight solutions that improve automotive fuel efficiency and comfort, consumer product safety and buildings with a better environmental performance.

BASF showcases the latest innovation in its Ultradur® product range. The new grade optimizes the manufacturing process of window profiles. Replacing steel as reinforcement in profiles, the lightweight Ultradur®

eliminates thermal bridge effects and significantly increases energy efficiency. This solution was jointly developed with the Dalian Shide Group, Shanghai, China.

The innovative and patent pending co-extrudable Ultradur® (shaped by forcing through a die) is the first engineering plastics innovation developed at BASF’s Innovation Campus in Shanghai, China.



Replacing steel as reinforcement in window profiles, the lightweight Ultradur® eliminates thermal bridge effects and significantly increases energy efficiency while at the same time adding comparable durability and strength.





BASF shows examples for sustainable development at Sustainable Brands Conferences



In his keynote, Ralph Schweens, President for BASF South America, presented CasaE, BASF's energy efficient model house in Brazil to the Sustainable Brands participants.

At three Sustainable Brands Conferences on three continents participants of BASF gave several keynote speeches and participated in discussions with various companies. The focus was on the importance of sustainable development for the brand value of companies.

On April 24 and 25, 600 attendees at the Sustainable Brands event in Rio de Janeiro exchanged their experiences on forward thinking businesses. In his keynote, Ralph Schweens, President for BASF South America, gave insights into innovation as a driver for sustainability. He highlighted the importance of investment in research and development to create sustainable solutions that meet the primary needs of society. Schweens explained how consumption of water, energy, and raw materials as well as emissions and waste can be reduced with innovative products for the construction industry. CasaE –

an energy efficient model house that BASF runs in São Paulo – showcases many of these products.

Participants of BASF were also present in a panel that promoted a discussion about the topic “Re-imagine the Business Strategy”. The panel addressed topics like the importance of applying sustainable innovation in products, identifying risks as opportunities to business, and joining forces between companies.

On May 28 and 29, the Sustainable Brands Conference in Istanbul was dedicated to sustainability and the cultural heritage. Ufuk Kocabaş, Professor at the University of Istanbul, gave a speech with the title “Yenikapi Project and ancient ship lab” on restoration and conservation of Byzantine shipwrecks with Kauramin®. The liquid impregnating resin produced by BASF is suitable for

the treatment and conservation of archaeological artefacts made of wood. The resin with its low viscosity rate, water-based structure and relatively low molecule sizes prevents the natural decomposition of ancient woods.

“The Shipwrecks found in Yenikapi are among the most distinguished antic shipwreck collections of the world and the ships from Byzantine period are a unique treasure in terms of shipbuilding techniques”, said Volker Hammes, Head of BASF Turkey, Middle East and North Africa and CEO of BASF Turk. Since the port of Theodosius was found in 2004 due to construction works, a total of 33 shipwrecks have been discovered in Yenikapi.

The third and largest Sustainable Brands Conference with about 2,500 participants took place in San Diego from May 2-5. Chris Bradlee, biopolymers market development manager at BASF North America, informed the audience about the compostable bags made of BASF's brand ecovio®. In the US, peanuts are sold with the ecovio®-packaging during home baseball games of the Seattle Mariners. In part, zero-waste-programs are traditionally viewed as cost intensive, Bradlee said. But with ecovio®-packaging the programs can be seen as salable. The initiative is a positive example for Bradlee - on the one hand sporting events create a lot of waste, but also provide a great opportunity to change the consumers' behavior.





BASF Poland on a journey to sustainability

Taking up the global direction to integrate sustainability into the company's strategy, BASF Poland has started the process of implementing sustainability with a comprehensive analysis of its key sustainability drivers. Based on these findings, the BASF Poland Management Team committed to the goal to be the leading chemical company in Poland. In this context, the team set itself the goal to live up to BASF's company purpose: "We create chemistry for a sustainable future."

Local business teams are invited to identify the sustainability claims of their clients and help tailor an offer that would enable them to meet their objectives of a sustainable development. Additionally, BASF Poland has started a co-operation with the Technical University of Warsaw to attract future employees.

Furthermore, BASF Poland has committed to support the work of the Ministry of Economy "Vision 2050" project and partnered with

the United Nations Global Compact. Here, BASF will contribute to a project which aims at reducing emissions within the transportation sector. This initiative allows BASF to showcase the contribution of modern catalysts to resource conservation and environmental relief even more effectively.

BASF's latest investment in the production plant in Środa Śląska which is producing a new generation of catalysts, contributes importantly.



BASF presents Ultramid® for flexible packaging films derived from renewable raw materials

BASF now offers high performance Ultramid® (polyamide), which is derived from renewable raw materials. BASF uses an innovative approach that replaces up to 100% of the fossil resources used at the beginning of the integrated production process with certified biomass. The share of renewable raw materials in the sales product is then indicated in the respective quantity. A third-party certification confirms to customers that BASF has used the required quantities of renewable raw materials which the customer has ordered in the value chain.

The resulting Ultramid®, which is produced according to the so called mass balance approach, is identical in terms of formulation and quality but associated with lower green-

house gas emissions and saving of fossil resources. Also, existing plants and technologies along the value chain can continue to be used without changes.

"Consumer demand for products made of renewable raw materials continues to rise," says Joachim Queisser, Senior Vice President of the Polyamides and Precursors Europe regional business unit. "This offering opens excellent possibilities for packaging film manufacturers to market their products accordingly."



Ultramid® for flexible packaging films is now available based on renewable raw materials.



more



BASF co-developed a water stewardship approach for agriculture

The EWS standard (European Water Stewardship) is a system for business and agriculture to assess, improve and communicate sustainable water management practices. BASF co-developed and tested this water stewardship approach



for agriculture. Therefore, a team of the European Water Partnership (EWP) performed a pre-screening at BASF's farm Rehhütte in Limburgerhof, Germany in April. Rehhütte is a demonstration farm for the Agricultural Products Division of BASF.

The pre-screening is an internal assessment of the current state of the operational water management. The implementation of the EWS standard on the Rehhütte farm included

The EWS team took a close look at the BASF farm Rehhütte to assess the operational water management.

the identification of all farm inputs and the classification of field vulnerability for processes like surface runoff, drainage, leaching, spray drift and fertilizer misplacement. By using farm information on substance use, storage conditions and potential water pollution pathways as basis, the EWS helps to identify water pollution related risk levels associated to each substance.

In addition, the EWP and BASF teams tested an excel-sheet based self-assessment tool to make the pre-screening easier for farmers. The tool will soon become available for EWS standard implementation for all agricultural communities.



Ludwigshafen site receives certification according to EWS standard

The production site in Ludwigshafen has recently been awarded gold-level certification according to the European Water Stewardship standard (EWS). This attests the exemplary handling of the important resource water at the site. Bart Maes, auditor of TÜV Nord Integra, assessed the entire water management performance, from extraction of water to its reintroduction to the River Rhine. The examination includes the four principles of water stewardship: sustainable water abstraction, ensuring good water status, protection of high conservation areas and equitable water governance. "The Ludwigshafen site uses

more than one billion cubic meters of water annually, in particular as a coolant," said Dr. Linda von dem Bussche, Head of Environment & Permits. "In view of our high demand for water, the sustainable use of this resource is an important contribution to our corporate strategy. The EWS standard supports us in

further driving the efficient use of water at our site and in achieving our global water goals." In total, around 20% of all BASF sites are located in water stress areas. By the year 2020, BASF aims to establish sustainable water management at all sites in water stress areas by applying the EWS standard.

Michael Zürker, operations manager of the BASF waterworks, in a conversation with Bert Maes (TÜV Nord Integra) and Dr. Andrea Stoegbauer (Department Environment and Permits at BASF), responsible for preparing and supervising the audit for BASF.





BASF again named one of China's Top 100 Green Companies

BASF was again named one of "China Top 100 Green Companies" at the China Green Companies Summit, mid of April. This marks the seventh year in a row BASF has been recognized for its leadership in this category. The cross-sector

ranking was initiated by China Entrepreneur Club (CEC), a coalition of influential private sector business leaders in China and is held annually to correspond with the international Earth Day (April 22). This year's summit brought together

over 1,000 domestic and international business leaders and executives from various areas in Nanjing, Guangxi Zhuang region.



BASF is named "China's Top 100 Green Companies" for seven years in a row. Johnny Kwan, Senior Vice President, BASF marks the moment with Maggie Cheng, Secretary-General, China Entrepreneur Club.



Increased spending on research and development

At the BASF Research Press Conference on May 27, Andreas Kreimeyer, member of the Board of Executive Directors of BASF SE and Research Executive Director, reported that the company increased its spending on research and development to €1.8 billion (2012: €1.7 billion) in 2013. BASF has a workforce of around 10,650 employees working in international and interdisciplinary teams on around 3,000 research projects – 1,300 patents were filed in 2013. Sales of new products introduced onto the market within the past five years amounted to about €8 billion.

The main topic of the Press Conference was nanotechnology, which enables many innovations of BASF such as automotive technology, energy, electronics or construction



and medicine. Another innovation topic was put on high-performance insulation materials with reduced thermal conductivity that is used in old and new buildings.



SLENTITE™ needs only half the space compared to traditional materials while offering the same insulation performance. The pores have a diameter of only 50 to 100 nanometers. As a result, the air molecules freedom of movement is limited and the transfer of heat is reduced.

Read on & Events:

[BASF nominated for CSR price of the German Government 2014](#)

[Start of application phase for the third annual "Science Award for Electrochemistry" from Volkswagen and BASF](#)

[BASF boosts photoinitiator production in Mortara](#)

[BASF to introduce new LNT+CS4F™ emissions system that removes particulate matter from diesel motors](#)

[BASF doubles production capacity of Hexamoll® DINCH®, a plasticizer developed especially for human contact](#)

[BASF inaugurates California Research Alliance](#)

[First Styrodur® plant completely due to more eco-friendly PolyFR switched to new flame retardant](#)

[Together for Sustainability: Two new companies join the initiative](#)

[ecovio®: BASF is transforming zero waste in a co-creative partnership with the Seattle Mariners and Seattle Public Utilities](#)

Material Aspects

Eight material aspects have been identified for BASF based on the results of the stakeholder survey and internal workshops.



Employment and
Employability



Energy and
Climate



Food



Operational
Excellence



Responsible
Partnering



Products and
Solutions



Resources and
Ecosystems



Water

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Do you have questions or comments?

We are looking forward to your suggestions.

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