

INNOVATIVE

ANNUAL AND SUSTAINABLE PERFORMANCE REPORT

2012

IN THE LOOP
STRAIGHT
FROM THE STATES

STRATEGY
THIOCHEMICALS,
AN UNDISPUTED
LEADERSHIP

CHALLENGES
CSR
ACCELERATES
PERFORMANCE

ARKEMA
INNOVATIVE CHEMISTRY

POWERING PERFORMANCE

Lighter vehicles, powerful photovoltaic cells, highly resistant paints and coatings, plentiful drinking water, long-lasting batteries, winning sports equipment: these are important challenges for industries, today and in the future. These are also what drive Arkema, now a global chemical specialties company, to develop with our customers competitive and sustainable innovations.

Arkema, from chemistry to performance.

ADVANCED MATERIALS
CUTTING-EDGE TECHNOLOGIES
BIOSOURCED PRODUCTS

TERRÉ DE SIÈNE Paris

ARKEMA
INNOVATIVE CHEMISTRY



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POINT OF VIEW

“WE ARE ENTERING A NEW,
MORE GROWTH-FOCUSED ERA.”

What were the highlights of 2012?

In an uphill business environment, especially in Europe, Arkema is proud to have turned in a very solid performance, posting an EBITDA just shy of €1 billion. Our financial performance is in line with the goals we set in the summer of 2012. Our implementation last year of several strategic projects cements our positions in specialty chemicals and sets us up nicely for the immediate future.

2012 also kicked off a new cycle of accelerated growth for Arkema, driven by sustainable development, an engine of innovation for us, and by stronger positions in emerging economies.

What explains Arkema's good results?

We were helped by our excellent positions in growing niche markets, our strong presence in the United States and by the gradual integration of our acquisitions. Arkema's revenue grew 8% in 2012, to €6.4 billion. Our EBITDA margin stood at 15.6%, in the top bracket for the chemical industry, a terrific performance in today's mixed, volatile business environment.

In contrast to a solid North America, and to Asian markets whose growth ultimately fell short of expectations, the situation in Europe proved relatively tough and took a turn for the worse in the fall, especially in France. Arkema also has a very solid financial structure, with a debt level of around 40%.

Has Arkema changed in the last few years?

The company has grown much stronger over time. Spun off in May 2006, Arkema, which at this time had a disparate portfolio of businesses and low profitability, has grown into a top-tier global chemical producer in just a few years. We got there by sharply improving our competitiveness, shifting the focus of our portfolio and emphasizing innovation and growth in emerging economies, especially China. This strategy enabled us to sharply improve our profitability, adopt a truly coherent market position and emerge a top three global producer in virtually all our product lines. Our divestment of the vinyl products segment in the summer of 2012 was part of that strategy.

Today Arkema is not just a financially healthy company; we have achieved a nice balance among our three specialty segments of high performance materials, coating solutions and industrial specialties. We're also much more geographically balanced. Arkema now generates more than a third of its revenue in North America, 40% in Europe and just over 20% in Asia.

What can you tell us about Kem One's problems?

The financial and industrial preparations prior to creating Kem One were lengthy. We provided the company with a large cash contribution and a robust, debt-free balance sheet, divesting an aligned, end-to-end business ranging from upstream electrolysis and PVC production to downstream processing of PVC into compounds, pipes and profiles.

We don't have complete information on everything that has happened since the sale, but would like to be able to understand how the situation arose. In particular, we would like to know more about how Kem One was managed



THIERRY LE HÉNAFF,
CHAIRMAN & CHIEF EXECUTIVE
OFFICER OF ARKEMA

after the divestment. What's more, a series of unforeseeable events have occurred since October 2012. Business conditions in Europe, especially France, have taken a sharp turn for the worse. We see it ourselves with our own product lines. In addition, technical incidents have occurred, both at Kem One's facilities and at the Lavera site, its main supplier. These events hurt the company's financial situation badly. In light of all this, Arkema agreed to defer payment of receivables and, since Kem One SAS went into receivership, we've also agreed to provide substantial financing for the observation period.

Is innovation still central to Arkema's strategy?

We're a company rooted in innovation, to drive our customers' performance. Our new visual identity and strong baseline, "Innovative Chemistry", signal our desire to put our innovations to work on behalf of major global challenges such as growing urbanization, energy conservation and the development of light, renewable materials. So R&D does play a vital role in Arkema's focus on growth.

How does Arkema approach corporate social responsibility?

Our strategic position as a central player in the industry, dedicated to serving our customers, creates an obligation for us to set an example of excellence in environmental awareness, safety and sustainability in chemical production. I aim to make Arkema a socially responsible chemical company. I firmly believe that implementing an ambitious corporate social responsibility (CSR) policy creates value for both stakeholders and the company itself.

“A CULTURE OF INNOVATION,
CLOSENESS TO CUSTOMERS
AND A WILLINGNESS TO
CONTINUALLY ADAPT TO
A CHANGING WORLD ARE
PART OF ARKEMA'S DNA.”

FIGURES

2016 Goals

Revenue of
€8 billion

An EBITDA margin of
16%

Gearing below
40%

Will you continue your dividend policy?

In light of our good 2012 earnings, the Board of Directors has proposed that the June 2013 Annual Shareholders' Meeting significantly raise our dividend, to €1.80 per share compared to €1.30 last year. The increase reflects both our performance and our confidence in the company's medium-term outlook. It also aligns with the dividend policy reiterated in September 2012, which is designed to gradually move us to a 30% payout ratio.

How is 2013 looking?

We are confident that we'll be able to post a very solid year in 2013, as we did in 2012, despite a mixed economic situation. In North America, the economy should continue to mend. Asia may rebound little by little, after a fairly disappointing 2012. In fact, China is showing a few noticeable signs of recovery. On the other hand, demand could remain weak in Europe this year. On the whole, the macroeconomic environment looks like it will be similar to 2012, with some degradation in Europe offset by opportunities in other parts of the world, where we have concentrated our growth potential.

Our priorities for 2013 are to start up a new thiochemicals complex in Malaysia in early 2014, add new acrylic acid capacity in Clear Lake, Texas and finalize two major capital spending projects to upgrade our Lacq and Jarrie sites in France. To support our future expansion and continue upgrading our sites, we have planned record capital expenditures of €500 million in 2013.

What are your goals for 2016 and beyond?

Arkema is entering a new phase of more accelerated growth. Our current geographic position, strong in Asia and the United States, the potential of specialty niche markets, and quality projects that are still in the planning stage make us genuinely confident in our continued ability to create value. So our 2016 goals remain intact and include revenue of €8 billion, a 16% EBITDA margin, debt below 40% and a balanced three-way distribution by segment and region.

We have a clear roadmap for getting there. We want to accelerate our growth in high-performance materials through sustainable development innovations. We're also going to continue targeted acquisitions in two priority areas, materials and downstream acrylic operations. We also want to strengthen our presence in faster-growing countries, taking a diversified approach to China, India, the Middle East and Brazil. Another goal is to further secure our access to critical feedstocks. Finally, competitiveness remains vital. To maintain our market share, we will continue to stress operational excellence where we face a number of challenges to meet around the world, in Europe and especially in France.

Beyond 2016, we think that Arkema's rate of growth will remain very steady. We expect to post revenue of €10 billion and an EBITDA margin of nearly 17% by 2020.

“WE HAVE IMPLEMENTED AN AMBITIOUS STRATEGY TO BECOME A GLOBAL LEADER IN SPECIALTY CHEMICALS AND ADVANCED MATERIALS BY 2016 AND TO KEEP GROWING STEADILY THEREAFTER.”

3 BUSINESS SEGMENTS

HIGH
PERFORMANCE
MATERIALS

INDUSTRIAL
SPECIALTIES

COATING
SOLUTIONS

11 BUSINESS UNITS

Technical Polymers

Filtration and Adsorption
(Ceca)

Organic Peroxides

Thiochemicals

Fluorochemicals

PMMA (Altuglas
International)

Hydrogen Peroxide

Acrylics

Coating Resins

Photocure Resins
(Sartomer)

Rheology Additives
(Coatex)

**WORLD
No. 1 TO 3
POSITIONS**
on its main businesses

14,000
employees

10 R&D centers

91 production sites

Sales of
€6.4 BILLION
of which
€150 MILLION
dedicated to R&D

2012

HIGHLIGHTS

LAUNCH

JANUARY - ARKEMA INTRODUCES CELOCOR®

Voided latex product Celacor® allows for titanium dioxide reduction in water based paints with a balanced mix of performance properties.

STRATEGY

FEBRUARY - ACQUISITION OF HIPRO POLYMERS AND CASDA BIOMATERIALS

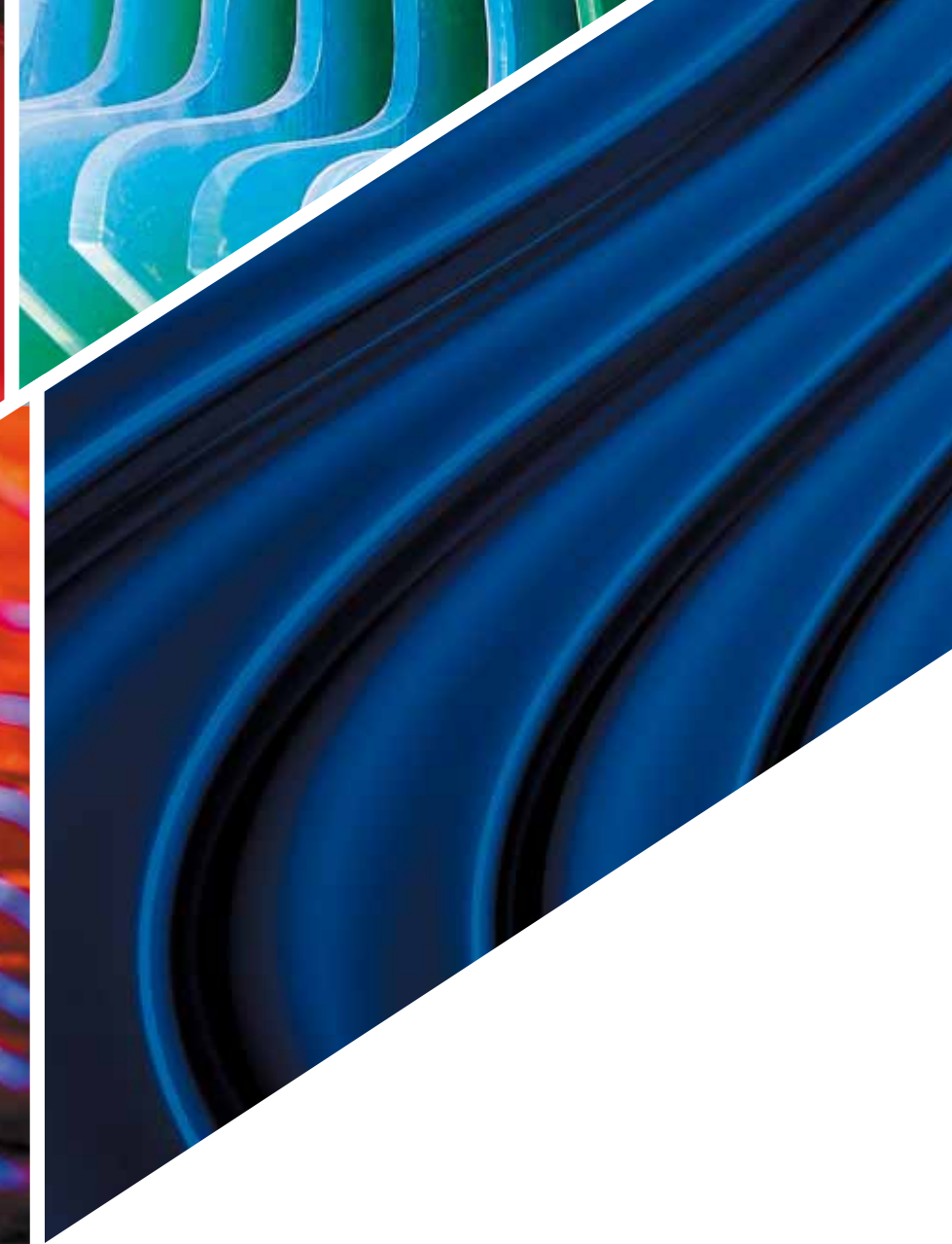
Arkema speeds up its development in Asia and in green chemistry by acquiring the Chinese companies Hipro Polymers and Casda Biomaterials, respectively producer of specialty biosourced polyamides and the world's leading producer of sebacic acid processed from castor oil.

PARTNERSHIP

APRIL - TWO NEW JOINT LABORATORIES WITH CEA

Arkema and CEA (French Atomic Energy & Alternative Energy Commission) are to extend their existing collaboration in photovoltaics to the field of micro-electronics and organic electronics by setting up two joint research laboratories. These public-private mixed laboratories will enable the development of new ultra high-performance materials and their integration within manufacturing processes in growth areas of the electronics sector in France.





STRATEGY
JULY - DIVESTMENT OF VINYL
PRODUCTS ACTIVITIES

INNOVATION
SEPTEMBER - ALTUGLAS® SHIELDUP
AWARDED PIERRE POTIER PRIZE

By replacing glass in cars, Altuglas® ShieldUp helps reduce the weight of vehicles and therefore fuel consumption.

PARTNERSHIP

JUNE - LAUNCH
OF "LACQ CLUSTER
CHIMIE 2030"

Total, Sobegi (a Total and GDF Suez subsidiary) and Arkema inaugurate the "Lacq Cluster Chimie 2030" project in France which represents an exemplary industrial redevelopment of the site and establish the economic activity and employment in the Lacq region over the long term.

The three partners will be investing 154 million euros to transform the Lacq industrial platform into a pole of excellence in fine chemicals and specialty chemicals. This investment has the backing of the French Government and of local authorities.

IMAGE

**SEPTEMBER - ARKEMA
ACQUIRES A NEW
VISUAL IDENTITY**

With a renewed focus on specialty chemicals and innovation, Arkema now enters into a new phase in its development. Accordingly, the Group is acquiring a new visual identity and a new signature "Innovative Chemistry" which reflects its new positioning in its high-added-value niches as well as the quality of its innovation.

STRATEGY

**OCTOBER - DIVESTMENT
OF TIN STABILIZER BUSINESS**





STRATEGY

OCTOBER - ACQUISITION OF AN ACRYLIC EMULSIONS SITE IN BRAZIL

The acquisition by the Arkema subsidiary Coatex of an acrylic additives and emulsions production site from Brazilian company Resicryl fits perfectly with the Group's strategy to increase its presence in high-growth countries, particularly in Latin America, and strengthen its downstream integration of its acrylics activities.

DEVELOPMENT

OCTOBER - START OF THE CONSTRUCTION OF THE BIO-METHIONINE AND THIOCHEMICALS COMPLEX IN MALAYSIA

In the presence of the Prime Minister of Malaysia, CJ Cheiljedang and Arkema invited 500 guests for the ground breaking ceremony of their project in Kerteh, in the State of Terengganu in Malaysia.

INNOVATION

NOVEMBER - ALTUGLAS® RNEW WINNER OF "R&D 100 AWARDS"

"R&D 100 Awards" of the American magazine R&D recognizes the 100 most technologically significant products introduced into the marketplace over the past year.

AWARD

DECEMBER - ARKEMA IN THE "2012 TOP 100 GLOBAL INNOVATORS"

For the second year in a row, Arkema ranks among the world's 100 most innovative companies, according to Thomson Reuters' ranking.

HONOUR

DECEMBER - THIERRY LE HÉNAFF RECEIVES THE AWARD FOR BEST INVESTOR RELATIONS BY A CEO

This award also recognizes the educational work and professional commitment of Arkema's Investor Relations team since the Group's stock market listing in May 2006.

IN THE LOOP

STRAIGHT FROM THE STATES

Increasingly geared towards the American market, Arkema benefits from key positions in growing market segments. In coming years, the Group intends to reinforce this strong and profitable presence.





America has shaped the Arkema of today. Since our creation, we have enjoyed a strong presence in the United States, which on average accounted for 25% of our revenue between 2006 and 2010, thanks to a wide range of products spanning specialty polyamides, fluoropolymers and fluorogas, polymethyl methacrylate (PMMA), hydrogen peroxide, organic peroxides, thiochemicals, glass coating additives and more.

We have boosted our presence significantly since 2010. Acrylic assets from Dow Chemical fell into our hands in 2009, coating and photocure resins were acquired from Total in 2011, major investments were made in the Clear Lake (acrylics) and Beaumont (thiochemicals) plants and numerous innovations were launched on the market. In these last few years, there have been just as many major advances propelling the Group among market leaders in the United States.

With 34% of current turnover generated across the Atlantic, the Group's global presence is now much more balanced. *"Arkema has become a major player in North America. Our strength here allows us to tap into the region's economic vitality,"* says a pleased Bernard Roche, President and CEO of Arkema Inc.

UNSTOPPABLE MOMENTUM

Today, in a highly volatile economic environment, American industry is experiencing a recovery. Indeed in 2012, automotive production re-launched in the United States, while rustles of activity were noted in the building construction sector. Shale gas production is also making the country more competitive by sharply lowering the cost of energy. A number of sectors are taking full advantage of this windfall, including the chemical industry, whose energy bill accounts for a hefty share of its costs. The region is expected to grow steadily in the years ahead. By 2016 Arkema expects to post €2.8 billion in revenue from North America — 35% of our global sales — further cementing our place as a major operator in the United States.

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STRONG ROOTS IN NORTH AMERICA

€2.176 billion in sales

26 production sites

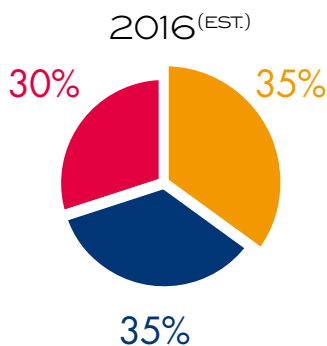
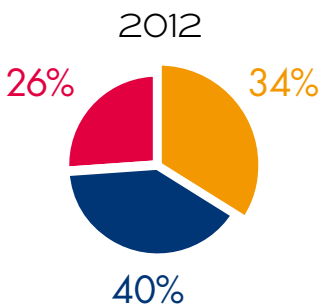
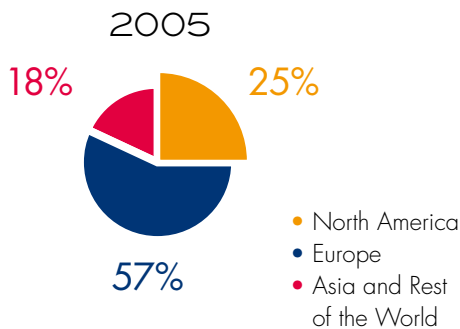
2 R&D centers

2,600 employees

.....

A BETTER GEOGRAPHIC BALANCE

(Sales)



(est.): estimated



A HEALTHY AUTOMOTIVE INDUSTRY

In 2012, the recovery of some flagship sectors in the United States, such as transportation, was a major boon to Arkema. *"Our Plexiglas® polymethyl methacrylate (PMMA)¹ got a big boost from strong automotive industry demand last year,"* stresses Kirsten Makel, Business Director, PMMA Resins for Altuglas International in the United States. Transparent and lighter than glass, PMMA is used for exterior lighting instrument cluster lenses and certain exterior trim details. *"The market for this versatile polymer is expected to grow into the future. We're going to bring new products to market and deliver value-added services to our customers,"* adds Kirsten. Arkema is a leading global supplier of PMMA through our subsidiary Altuglas international.

Another Arkema business that is benefiting from the auto industry's rebound is functional additives, especially Luperox® organic peroxides. These curing agents go into producing the rubber used to make hoses, belts, cylinder head gaskets, O-rings and auto body gaskets. *"Number two in organic peroxides, both in the United States and globally, Arkema has continued to invest to supply the market and optimize production at our U.S. plants,"* says Manny Katz, Managing Director of the Organic Peroxides Business Unit.

The bounce in automotive industry sales has also had a positive impact on fluorocarbon gases, especially Forane® refrigerants, which are used in vehicle air conditioning systems. *"Arkema is one of the world's top producers of fluorochemicals. It has been a major player in the United States for many years. We have built very strong relationships with our customers in large, fast-growing markets,"* points out Rich Rowe, Managing Director of the Fluorochemicals Business Unit. Fluorogases have applications in other sectors too, such as commercial and residential air conditioning, industrial and commercial refrigeration, the food industry, refrigerated trucks and home cooling systems. *"We offer a very complete, complementary line of products, including hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC) and hydrochlorocarbons (HCC). But we're actively developing the technologies of the future, for example by working on the next generation of fluorogases, called hydrofluoroolefins (HFO), and by offering solutions which match to our customers installations,"* says Rich.

1. Arkema markets its acrylic resins and sheets under the brand name Plexiglas® in the Americas and Altuglas® in Asia, Europe, Africa and the Middle East.





CONSTRUCTION'S EXPECTED RECOVERY

The construction sector, another major market for Arkema, is expected to recover in the United States both this year and next. The industry is a big purchaser of organic peroxides, to improve the performance of PVCs and other plastics used widely in the building trades. *"To spur the growth of our Organic Peroxides Business Unit, we are currently looking for acquisition targets around the world, including in the United States,"* continues Manny Katz.

Arkema's chemicals for paints, coatings and adhesives will also get a boost from the construction upturn, especially since the integration of Total and Sartomer's resins assets was completed in 2012. *"Arkema is now a major supplier to the paints, coatings and adhesives market in the United States. We're a global operator, ranked third in the world with €1.6 billion in sales in that segment i.e. around 25% of Arkema's sales. Arkema offers a unique line of products, innovations and end-to-end solutions. We will stay focused on high-value-added, environmentally friendly products, to keep our customers happy. Our coatings business should keep growing,"* predicts Richard Jenkins, Global Group President of the Coating Resins Business Unit.

.....

60%

That is the increase in Arkema's North America revenue since 2005, thanks in part to acquisitions by our Coating Resins business.

.....

A BOOMING MARKET FOR CHICKEN FEED

Demand for chicken feed is soaring in the United States, and sales of our thiochemicals are soaring right along with it. *"Our Beaumont plant in Texas specializes in intermediates for poultry food additives. It makes methylmercapto-propionaldehyde (MMP), used to produce methionine, which is added to chicken feed to stimulate the birds' growth,"* stresses Christophe André, Managing Director of the Thiochemicals Business Unit.





TESTIMONIAL

SHERWIN WILLIAMS, COATINGS CUSTOMER AND PARTNER

“SUPPLIER RELIABILITY IS CRUCIAL TO US. ONE OF THE REASONS WE CHOSE ARKEMA IS THAT IT’S A GLOBAL, INTEGRATED COMPANY. WE ARE WORKING TOGETHER TO DEVELOP NEW PRODUCTS TO IMPROVE THE PERFORMANCE OF OUR PAINTS. HAVING A SINGLE, INTEGRATED, GLOBAL PARTNER IS ALSO HELPING US EXPAND IN SOUTH AMERICA, EUROPE AND ASIA.”

BOB ELLIS,

Vice President Global Procurement for Sherwin Williams, a major paint and coating manufacturer.



OPERATIONAL EXCELLENCE

To meet steady demand from our customers, we are constantly improving the operational excellence of Arkema plants. Our Clear Lake, Texas facility, for example, cut the feedstock used for acrylate production by 8% between 2008 and 2012. In three years, we have invested \$110 million in facilities to produce acrylic acid and its derivatives. Last year, we opened a new 2-ethylhexyl acrylate unit in Bayport, Texas, and our recently expanded Clear Lake units will soon make it possible to produce another 30,000 tons of acrylic acid and 45,000 tons of methyl acrylate. Meanwhile, a major push to optimize processes boosted operational efficiency at Beaumont, Texas, a linchpin of our thiochemicals output. The Texas plant should continue to be extremely productive in the coming years.

ALL EYES ON SAFETY IN THE U.S.

Safety, Arkema’s top priority, has improved sharply in the last few years in the United States. The Total Recordable Injury Rate (TRIR) there has fallen to 1.8 in 2012 from 3.9 in 2010. *“The safety performance of our U.S. subsidiary not only ranks high at Arkema, it also stacks up well against our competitors in the United States,”* says Bernard Roche, President and CEO of Arkema Inc.



TRACKING SKILLED AND TALENTED PEOPLE

As Arkema grows in the U.S., we need increasing numbers of skilled and talented people. And we have made significant progress, especially over the last year, by expanding our use of social media for recruiting and upgrading our on-line presence and applicant tracking. We now track thousands of applicants each month and have created Talent Communities to identify and maintain contact with thousands of passive candidates who have expressed an interest in Arkema.

Arkema has grown in name recognition as well. We have partnered with leading universities in the U.S. to develop pipeline programs for chemical engineering graduates and PhD scientists. And we will soon have a similar program with key universities for recruiting technical sales people.



INNOVATIVE MATERIALS TO SERVE U.S. MARKET



Innovation is the engine of Arkema's growth. Dr. Ryan Dirkx, Vice President of Research & Development in the United States, shares a few of the recent successes of our North American R&D teams.

How is Arkema's U.S. R&D organized?

It is focused on our customers and their markets. We thoroughly understand their needs and goals and are involved in very technical partnerships with them. We began working this way several years ago and it has given us a competitive advantage.

We have two R&D centers in the United States. King of Prussia, in Pennsylvania, is dedicated to high performance materials and industrial specialties. Cary, in North Carolina, is responsible for developing coating materials.

However, Arkema's R&D organization is global and we work very closely with the company's other research centers. We work in concert with researchers in Verneuil-en-Halatte, France on coating products. We're in constant touch with the Kyoto, Japan and Cerdato, France centers for PVDF⁽¹⁾. We also collaborate with our French colleagues at the CRRA research center on fluorogases and hydrogen peroxide, at the Carling center on acrylics and with the GRL center's teams on PMMA⁽²⁾ and thiochemicals.

What recent innovations have Arkema's U.S. research teams helped develop?

We're involved in a number of areas, with some focus on our innovation platforms. Energy efficiency, energy storage and sustainable polymers are themes that often recur in our product-development and solutions. We continue to develop materials, such as PVDF, used in rechargeable batteries. We're developing new PMMA grades for light-emitting diodes lights that meet new U.S. standards for LED lighting technology. These new grades work together to offer higher reflectivity and more effective and uniform light diffusivity. Another focus is creating lighter materials, to save energy, in automotive, industrial and aerospace applications.

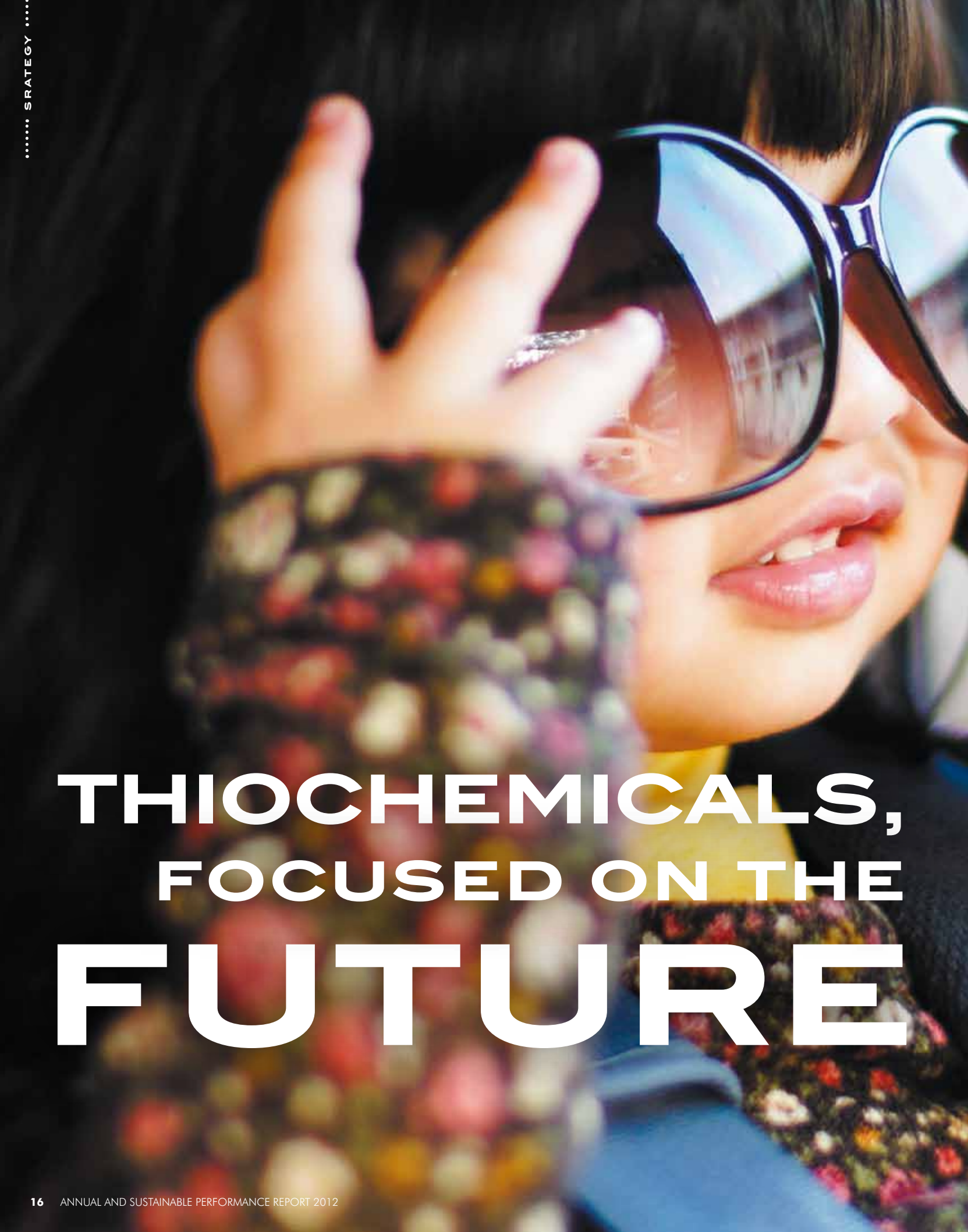
One potential way to lighten materials is expanded polymer or polymer foam, which can be used to make parts that are both highly engineered and lightweight.

Another of our innovation platforms is biosourced products. In partnership with NatureWorks, we are developing polymer additives that enhance the properties of their PLA⁽³⁾ polymer which is derived from corn. We have also introduced a new family of PMMA/PLA alloys which offer both performance and green advantages.

PMMA resins also offer very high-tech, ultra-UV-resistant properties and have many potential applications, for instance in attractive window profiles, decking materials, automotive body panels and lawn and garden equipment. The PMMA is used to protect less weatherable structural polymers and to provide a colorful, high gloss appearance.

One of our prime paint innovations is Celacor[®], an opaque acrylic polymer with excellent hiding properties that can partly replace titanium dioxide in water-based paints. It's a substitute that comes in the nick of time for paint manufacturers facing a shortage of increasingly expensive titanium dioxide.

1. Polyvinylidene fluoride.
2. Polymethyl methacrylate.
3. Polylactic acid.

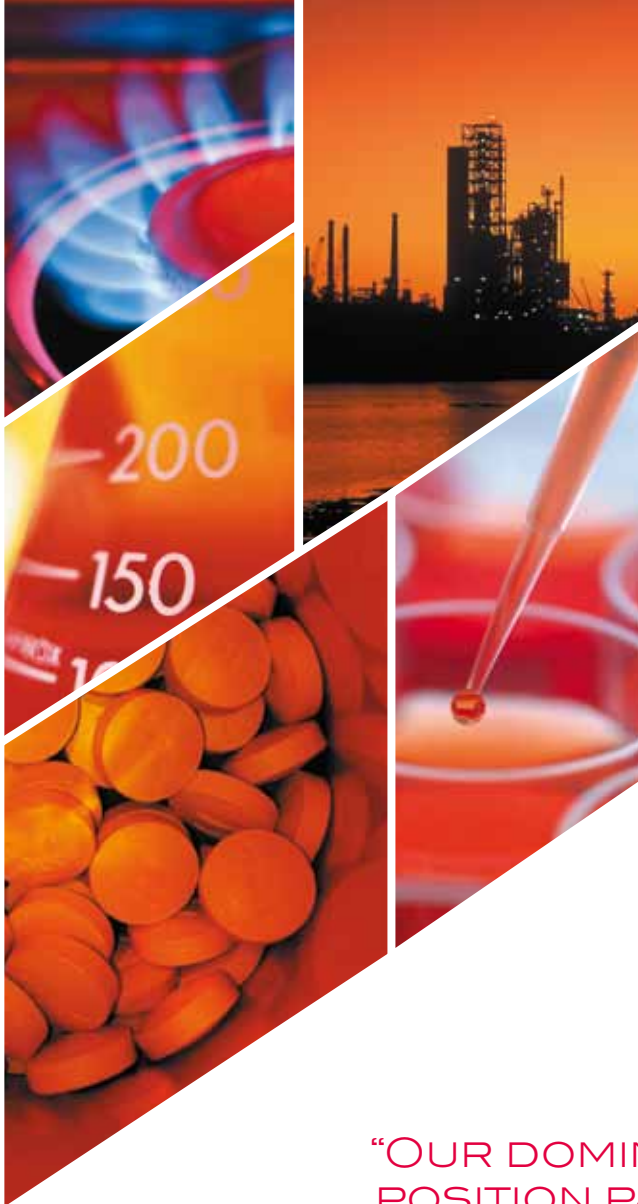


**THIOCHEMICALS,
FOCUSED ON THE
FUTURE**



The world leader in thiochemicals, or sulfur-based chemicals, Arkema continues to expand strongly in growth markets. Our future Malaysian plant should allow us to meet rising customer demand.

Arkema knows just about everything there is to know about sulfur. The world leader in thiochemicals, we have been proficient in the complex, technical processes used to produce fine chemicals derived from sulfur for 60 years. Our longtime involvement goes back to the 1950s in France and the discovery of the Lacq Basin, containing natural gas with a very high sulfur content. Rooted in the past but with its sights set firmly on the future, Arkema's thiochemicals business is constantly finding new applications in booming sectors, developing new, greener chemicals and branching into new regions.



UNDISPUTED LEADERSHIP

Arkema supplies thiochemicals to five major markets: animal feed, refining and petrochemicals, natural gas odorants, soil fumigation, and solvents. These up-and-coming markets are projected to post global growth of 4.5% annually in the years ahead.

"In the last few years, we have become an undisputed leader in the highly specific sulfur chemical fields by tapping into our global expertise and offering fairly unique, combined-service packages. We started out in the Lacq Basin in France, branched out to Rotterdam in the Netherlands, then to Beaumont, Houston and Mobile facilities in the United States and, soon, to the new plant we're building in Malaysia," stresses Christophe André, Managing Director of the Thiochemicals Business Unit.

"Our leadership is based on an international, end-to-end presence, patent-protected technology and technical know-how, highly specialized teams and a line of products that has evolved through major innovations."

"OUR DOMINANT POSITION PAVED THE WAY FOR US TO ESTABLISH LONG-TERM PARTNERSHIPS. WE CAN FOLLOW OUR GLOBAL CUSTOMERS ANYWHERE ON THE PLANET, OFFERING SERVICES THAT SET US APART, WITHOUT ANY INTERRUPTION IN SUPPLY."

CHRISTOPHE ANDRÉ,

Managing Director, Thiochemicals Business Unit



FIGURES

9%
of Arkema's 2012 revenue

The world leader

4.5%
annual growth

9 and soon 10,
production sites: Beaumont and Houston, Texas and Mobile, Alabama (United States), Lacq, Mourenx, La Chambre, Lannemezan and Rion-des-Landes (France), Rotterdam (Netherlands) and, in early 2014, Kerteh (Malaysia)



SETTING OUR SIGHTS ON ASIA



For animal feed, Arkema markets methyl mercaptan, used to synthesize MMP (methylmercapto-propionaldehyde). MMP yields methionine, a nutritional supplement added to poultry feed. Methyl mercaptan is now made in the United States, at the Beaumont, Texas plant, where our partner Novus built an MMP unit. In 2014, our production of methyl mercaptan will expand to Malaysia, where we are currently making a major capital investment with our South Korean partner, CJ Cheiljedang, a leading global producer of the main amino acids used in animal feed. As dietary habits change and poultry consumption rises, especially in emerging economies, the potential of this market in the coming years is sky high.

For natural gas, Arkema offers a complete line of mercaptan-based odorants, for both natural gas (tetrahydrothiophene, Spotleak®) and liquefied petroleum gas (ethyl mercaptan, Vigileak®).

These chemicals are added for safety, to give the gas a specific odor so that leaks can be detected. A world leader in the supply of odorants, Arkema sells in every country. Gas odorization is common practice in Europe and the United States and is sharply on the rise in Asia, mainly in China. *"We offer both the product and the related service, the reason for our success with customers. Mercaptans can be tricky to handle. Gas customers are looking for a supplier that can provide them with what they need while also managing logistics,"* stresses Didier Leblanc, General Manager, Mercaptans. *"This is our advantage over our competitors. In the future, emerging marketplaces will tighten their regulations and require gas suppliers to odorize their gas."*

The dimethyl disulfide (DMDS) made by Arkema ranks with the best in the world. It is used in refining to recover sulfur from transportation fuels. Arkema customers

include the main oil companies and we have made extensive capital investments to follow the expansion of petrochemical and refining markets. *"Over the next three years, we're going to double our DMDS capacity, thanks to our new thiochemical complex in Malaysia and stepped-up capacity in the Lacq Basin in France,"* explains Didier. The petrochemical and refining markets should keep growing, driven by the rising demand for petrochemical derivatives and more stringent sulfur content standards for gasoline and diesel.

NOVUS AND ARKEMA, LONGTIME PARTNERS

Novus has a long-term relationship with Arkema that goes back decades. We picked Arkema as our supplier for its longstanding expertise in producing sulfur-based intermediates in the United States and Europe. Our current agreement dates from 2001, when we decided to install a methylmercapto-propionaldehyde (MMP) plant at the Arkema facility in Beaumont, Texas in the United States. Derived from the acrolein and methyl mercaptan made on site by Arkema, MMP is a feedstock for our production of Alimet®, an animal feed supplement based on methionine. Arkema put together a very cutting-edge team to build our MMP plant in Beaumont. It's a partner that adapts and scales up really quickly to meet our requirements. It works in a very transparent way, always thinking about options for growing our businesses together.

JEFF KLOPFENSTEIN,
President, Methionine Business Unit,
Novus International

INNOVATING TO BETTER PROTECT THE ENVIRONMENT

An innovative product developed by Arkema, Paladin® is used as a fumigant, to rid soil of parasites before planting and thus boost crop yields. Today, every square inch of soil must be as productive as possible to meet the planet's food needs. It's a new market and a very promising growth area. Paladin® has zero impact on the ozone layer, scant potential to contribute to global warming and breaks down very quickly in the air. It was developed as an alternative to methyl bromide, a fumigant designated for phase-out under the Montreal Protocol.

A NEW AGRICULTURAL APPLICATION FOR DMDS

Paladin®, Arkema's dimethyl disulfide (DMDS) for soil fumigation, was approved in the United States and Israel in 2010. This opened the door for Arkema to test and expand its use in Mediterranean countries (Turkey, Jordan, Egypt, Morocco). Paladin® is used to prepare farm fields for the planting and boost the yield of high-value-added crops such as strawberries and tomatoes. *"The advantages of Paladin® are that it has no impact on the ozone layer, it's a triple threat against nematodes (wormlike species), fungi and weeds, it is low in toxicity compared to its competitor, methyl bromide, and it breaks down fast without leaving any chemical residue, either in the fields or water tables,"* says Christian Forquy, Vice President, Thiochemicals R&D. In 2011 and 2012, Arkema secured authorization to market DMDS for fumigation in Morocco, Turkey, Jordan and Lebanon. Its approval process also got under way in Europe. Thanks to this new agricultural application, we expect to double our DMDS sales to 2020.



AN ALTERNATIVE TO SOLVENTS CLASSIFIED AS DANGEROUS

Arkema is a world leader in the production of dimethyl sulfoxide, or DMSO, an inexpensive, effective solvent that is safe for people and the environment and does not require labeling under European Union Directive 67/548/EEC on dangerous substances. It is widely used in applications such as pharmaceutical, chemical and polymer synthesis, agrochemical formulations, electronics (photoresist stripping and cleaning), industrial cleaning and paint stripping.

Because of its excellent toxicological profile and strong solvent power, DMSO is the best alternative to solvents classified as dangerous, such as dimethylformamide, N-methylpyrrolidone or N-ethylpyrrolidone, methanol and methylene chloride (dichloromethane). We provide our customers with the technical expertise to help them make the switch. Our website, arkema.com/dmsol, has the ecotoxicological, technical and regulatory information users may need and offers customized assistance from our research technicians to develop new application formulations.



HIGH-PURITY, HIGHLY ENGINEERED DMSO

DMSO HP is a high-purity grade used solely to synthesize organic compounds. It is the recommended solvent for synthesizing chemicals and polymers, especially when the purity of the final product is critical, as in the synthesis of active pharmaceutical ingredients, pesticides, and polyacrylonitrile, a carbon fiber precursor. Another high-purity grade is DMSO EG, whose residual metal content is kept below 10 parts per billion. It is an essential ingredient in photoresist stripping formulations used in making computer chips and TFT-LCD⁽¹⁾ displays.

1. Thin film transistor liquid crystal display

AN ASSORTMENT OF VALUE-ADDED SERVICES

Fuel sulfur recovery, the final step in refining, employs a process called hydrotreating. The process uses catalysts — nickel, molybdenum and cobalt oxides — that have to be activated by a reagent, DMDS, a process known as sulfiding. But the use of DMDS requires sophisticated expertise, which Arkema's teams have. That is what prompted the idea of offering technical assistance to go along with the sale of DMDS, a service dubbed Careflex®. *"This global service is provided in refinery purification units, by teams of highly qualified Arkema technicians. Our customers love it. The figures speak for themselves: 80% of refinery DMDS sales include Careflex® technical assistance,"* says Christian Forquy.

In marketing too, Arkema stands out from the crowd through ever more sophisticated services. *"In Asia we're competing with a fair number of local companies, especially in China, India, South Korea and Japan. We rely on services, distribution, packaging and our technical expertise to set us apart. As example, for some refineries and petrochemical plants, we repack our products into small containers. And we sometimes send Arkema service technicians out to the site to deliver them. We also provide training in how to handle our products."*

Thanks to this signature approach, we have watched our business grow sharply. In the last six years, thiochemicals have grown 10 to 15% a year in Asia," says a pleased Kenny Gan, Managing Director, South East Asia.



RECOGNIZED KNOW-HOW

“OUR STRENGTH IN THIOCHEMICALS STEMS FROM ARKEMA’S UNIQUE INDUSTRIAL KNOW-HOW. WE KNOW HOW TO WORK WITH THE FEEDSTOCK, HYDROGEN SULFIDE, A HIGHLY TOXIC AND CORROSIVE GAS. OUR PEOPLE HAVE THAT CAPABILITY FOR LARGE-SCALE INDUSTRIAL PLANTS.”



CHRISTIAN FORQUY,
Vice President, Thiochemicals R&D



LACQ'S SMART INDUSTRIAL REPURPOSING

The Lacq gas basin in France is getting a second life. In June 2012, Arkema, Sobegi and Total cut the ribbon on the “Lacq Cluster Chimie 2030” project. The trio of companies have decided to jointly invest €154 million — €36 million from Arkema alone — to repurpose the industrial site and making sure that it will be around in 2030. The project gives Arkema a secure supply of its sulfur feedstock in the years ahead by prolonging the production of Lacq’s gas, at a slower rate. The new facilities will be up and running by end-2013.

A NEW PLANT IN MALAYSIA

To meet growing demand for methionine and thus methyl mercaptan, Arkema has embarked on a flagship project to build a plant in Malaysia, in partnership with South Korea's CJ Cheiljedang. We are proficient in the process of making methyl mercaptan, an intermediate derived from the sulfur used to produce methionine. With the help of Arkema's R&D teams, CJ Cheiljedang has developed a new, innovative, highly competitive and integrated industrial bio-fermentation process to produce L-methionine, a bio-amino acid used in animal feed, from renewable feedstock. It is a world first, as all of the methionine sold until now was based on fossil fuels. *"CJ Cheiljedang's technological expertise interlocks with ours perfectly, another advantage for our partnership. There's a lot of back and forth between France and South Korea,"* explains Christian Forquy.

The project is expected to involve a total capital outlay of \$450 million, split evenly between the two partners. CJ Cheiljedang will build and operate the bio-methionine unit and Arkema the thiochemicals unit. *"The thiochemicals unit should be finished early in 2014,"* says Christophe André.



Most of the chemicals produced by the new plant will be sold to Asian markets. And Arkema will have production facilities on three continents. *"With the new unit, we will be able to support market growth. We're going to branch out geographically and into new businesses, involving new applications and new services, to meet our customers' demand. As soon as our plant is ready, we'll be able to more fully meet the market's many demands,"* explains Kenny Gan.

A WIN-WIN PARTNERSHIP

“ Arkema, our partner in the bio-methionine plant in Malaysia, has unmatched expertise in thiochemicals and their production processes. It is also strongly committed to operational excellence, which is vital for a plant of this size. The overall character of its operations is a definite asset. Arkema has adopted international operational and safety standards. And it works to foster innovation and creativity in the chemical industry. We teamed up with Arkema because we operate globally and have the world's best industrial fermentation technology. Bio-methionine is an innovation because it's the first time a methionine has been developed using a biotech process. We've put in a lot of work up to this point and we intend to be the first to produce bio-methionine on a commercial scale. ”



JOHN KANG,
Vice President, CJ Bio,
CJ Cheiljedang

BOARD OF DIRECTORS

INDEPENDENCE, EXPERTISE AND DILIGENCE

The Board of Directors uses its expertise to steer the business in the right direction and closely monitor the implementation of our growth strategy.

Thierry Le Hénaff chairs the Board of Directors, which has ten other members, including a director representing employees. Nine directors, or 82% of the Board, are independent and two are women.

The Board of Directors monitors the implementation of Arkema's growth strategy and makes decisions about major transactions and projects. It meets at least four times a year and whenever the company's interests require.

Three Specialized Committees

The Board of Directors has created three specialized standing committees made up entirely of independent directors. Each committee examines the issues that fall within its area of expertise before they are presented and submitted to the Board for its approval.

The primary responsibilities of the Audit & Accounts Committee are to ensure the quality of internal control procedures and the reliability of the information provided both to shareholders and financial markets. It consists of three directors, Philippe Vassor, Chairman, Claire Pedini and Jean-Pierre Seeuws. Thierry Lemonnier, Arkema's Chief Financial Officer, is its Secretary.

The Appointment, Compensation & Governance Committee makes recommendations and proposals concerning the Board and its committees, Arkema's compensation policy and corporate governance principles and best practices. It is comprised of four directors, Thierry Morin, Chairman, François Enaud, Bernard Kasriel and Victoire de Margerie. Michel Delaborde, Executive Vice President, Human Resources & Communication, is its Secretary.

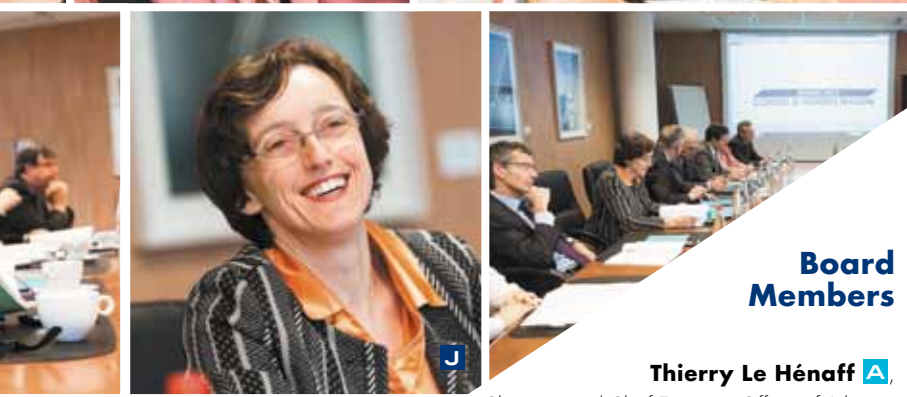
The Strategy Committee reviews Arkema's primary business directions, such as the major projects or strategic options proposed by senior management, acquisition and divestment opportunities and financial and stock exchange transactions. It is made up of the nine independent directors, including its Chairman, Jean-Pierre Seeuws. Bernard Boyer, Executive Vice President, Strategy, is its Secretary.



89.6% A GOOD ATTENDANCE RECORD



The Board met seven times in 2012, posting an average attendance rate for directors of 89.6%. Attendance has been perfect for the two meetings held so far in 2013.



Marc Pandraud (I), Chairman of Deutsche Bank's activities in France,
Claire Pedini (J), Senior Vice President, Human Resources, Compagnie Saint-Gobain,
Jean-Pierre Seeuws (K), former senior executive, diverse chemical companies.

Board Members

Thierry Le Hénaff (A), Chairman and Chief Executive Officer of Arkema,
Patrice Bréant (B), Director representing shareholder employees,
François Enaud (C), Chairman and Chief Executive Officer, Steria,
Bernard Kasriel (D), former senior executive, Lafarge,
Philippe Vassor (E), Chairman, Baignas S.A.S.,
Thierry Morin (F), Chairman of the Board of Directors, INPI,
Victoire de Margerie (G), Chairman, Rondol Technology,
Laurent Mignon (H), Chief Executive Officer, Natixis S.A.,
Marc Pandraud (I), Chairman of Deutsche Bank's activities in France,

THREE QUESTIONS FOR New Director Victoire de Margerie

At its November 7, 2012 meeting, the Board of Directors decided to submit Victoire de Margerie's name to the June 4, 2013 Annual Shareholders' Meeting for election as an Arkema director. We sat down with her for a chat.

Can you give us a capsule summary of your career?

I have been the largest shareholder and Chairperson of Rondol Technology, a small Franco-British business, since 2009. We make polymer processing equipment for micro-applications in high-tech sectors such as pharmaceuticals. Before that, my career was split into two major periods: 17 years as an operations manager and then senior executive at Elf Atochem, Carnaud Metalbox and Péchiney, notably in Germany and the United States; then eight years as a professor of industrial strategy at the *École de Management de Grenoble* business school. Today I also hold a few interesting directorships, at Arkema, aluminum supplier Norsk Hydro, investment firm Eurazéo and Morgan Advanced Materials, which makes industrial ceramic materials.

What is your opinion of Arkema?

Arkema is a great company. With the help of a solid strategy, good people and lots of guts and determination, Arkema has turned in an excellent performance over the last six years, thanks to the reorganization of its portfolio of assets (divestment of cyclical businesses and acquisition of companies positioned in emerging marketplaces or new product niches). The next step is to expedite organic growth through continued R&D and internationalization.

What kind of expertise will you bring to the Board?

I have expertise in polymer, metal, cement, ceramic and other materials as well as the full range of chemical processes such as electrolysis and surface treatments associated with their production and application. So I think I can bring to Arkema a few best practices involving technology management and ways to make the sector less capital intensive. My experience in Germany, North America and the United Kingdom should help me to thoroughly understand the strategy of Arkema's major competitors, nearly all of which come from those countries and regions, and to make a positive contribution to a continued winning strategy for Arkema in the future.

EXECUTIVE COMMITTEE

MAKING THE BIG DECISIONS

The Executive Committee is responsible for the day-to-day management of Arkema. It is chaired by Thierry Le Hénaff, Chairman and Chief Executive Officer.

When Arkema was spun off, the Board of Directors decided not to separate the functions of Chairman of the Board of Directors and Chief Executive Officer, to facilitate a simple, responsive, accountable decision-making process. Arkema's successful and rapid transformation into a flourishing company and a global supplier of specialty chemicals proves the effectiveness of that management choice.

The Executive Committee is led by **Thierry Le Hénaff** **A**, Chairman and Chief Executive Officer. He is assisted by two executive vice presidents in charge of operations and four executive vice presidents with functional responsibilities.

The Executive Committee is responsible for the day-to-day management of Arkema. It reviews all important corporate matters and major projects. It is a decision-making body that focuses on strategic planning and monitoring business and financial performance. It also makes sure that internal control processes are implemented.

Two Executive Vice Presidents in Charge of Operations

Pierre Chanoine and Marc Schuller are the two executive vice presidents in charge of operations. **Pierre Chanoine** **B** is responsible for the High Performance Materials business segment and the Fluorochemicals and Hydrogen Peroxide Business Units in the Industrial Specialties business segment.

Marc Schuller **C** heads the Coating Solutions business segment and the Thiochemicals and PMMA Business Units in the Industrial Specialties business segment. He also oversees the global procurement of energy and feedstock.

Four Executive Vice Presidents with Functional Responsibilities

Luc Benoit-Cattin **D**, Executive Vice President, Industry, oversees industrial safety, environment, sustainable development, technology and construction, logistics, quality and purchasing of goods and services.

Bernard Boyer **E**, Executive Vice President, Strategy, oversees strategic planning, economic research, acquisitions and disposals, internal auditing, insurance and risk management.

Michel Delaborde **F** is Executive Vice President, Human Resources & Communication.

Thierry Lemonnier **G**, Chief Financial Officer, has oversight for accounting, management control, cash management, legal affairs, tax, investor relations and IT systems.



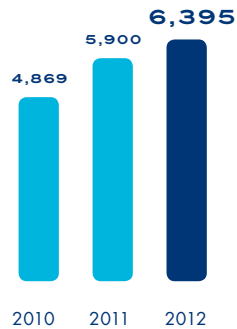


2012 FINANCIAL PERFORMANCE

In a volatile, less favorable economic environment than in 2011, Arkema again delivered a strong financial performance, confirming the validity of the repositioning of the Group's portfolio of activities towards higher value-added niche markets.

SALES

(in millions of euros)

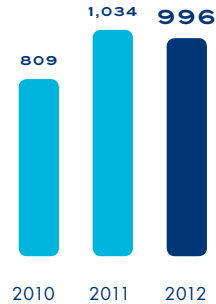


+8.4%

The increase in sales reflects an overall +9.4% change in the business scope effect resulting from the acquisition of specialty resins assets, Chinese companies HiPro Polymers and Casda Biomaterials, active in biosourced specialty resins, alkoxyates assets and an additives and acrylic emulsions site in Brazil, as well as the impact of the divestment of our tin stabilizer business. Volumes were down a slight 2.0% from 2011, reflecting high comparison basis in the first six months of the year, marked by restocking and exceptional growth in Asia.

EBITDA

(in millions of euros)



EBITDA MARGIN

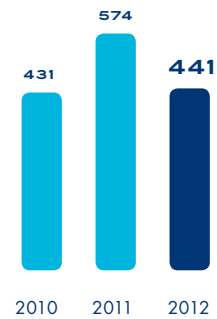
15.6%

Arkema posted EBITDA, or earnings before interest, tax, depreciation and amortization, close to 2011's record level, along with one of the chemical industry's highest EBITDA margins.

This performance reflects both the Group's positions in specialty businesses and its balanced geographic presence.

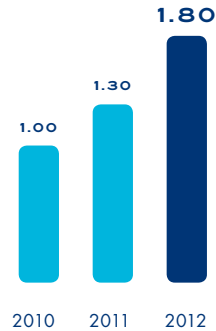
ADJUSTED NET INCOME OF CONTINUING OPERATIONS

(in millions of euros)



DIVIDEND

(in euros per share)



Confident in Arkema's medium-term outlook and solid balance sheet, and to continue sharing the success of our targeted growth strategy with our shareholders, the Board of Directors has decided to recommend a dividend increase to €1.80 per share at the Annual Shareholders' Meeting.

This decision is fully consistent with the new dividend policy announced by Arkema at an Investor Day in September 2012 and with our intent to significantly increase our dividend for 2012.

GEARING

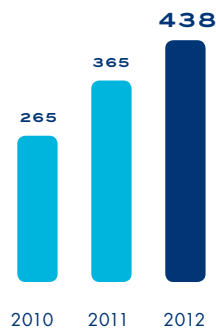
39%

in line with our target of maintaining it below 40%.

Net debt amounted to €900 million at December 31, 2012 compared to €603 million at December 31, 2011. This includes the net impact of acquisitions and divestments completed in 2012, in particular the acquisition of China's HiPro Polymers and Casda Biomaterials, focused on specialty biosourced polyamides.

CAPITAL EXPENDITURE*

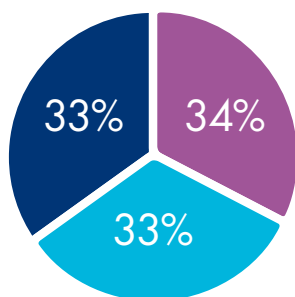
(in millions of euros)



Investments included €351 million in recurring capital expenditure, as well as spending on various industrial projects such as the construction of a thiochemicals platform in Malaysia, the Lacq 2014 project to secure sulfur feedstock for the next 30 years at the Lacq site, the electrolysis conversion in Jarrie, France, and the tripling of HiPro Polymers' biosourced polyamide 10.10 production capacity in China.

* Excluding vinyl activities.

SALES BY BUSINESS SEGMENT



High Performance Materials
€2,101 MILLION SALES

€361 MILLION EBITDA

17.2% EBITDA MARGIN

Industrial Specialties

€2,096 MILLION SALES

€399 MILLION EBITDA

19.0% EBITDA MARGIN

Coating Solutions

€2,175 MILLION SALES

€279 MILLION EBITDA

12.8% EBITDA MARGIN

INCOME STATEMENT

(in millions of euros unless otherwise indicated)

	2012	2011	2010
Sales	6,395	5,900	4,869
Operating expenses	(5,137)	(4,632)	(3,844)
Research and development expenses	(148)	(132)	(123)
Selling and administrative expenses	(432)	(374)	(340)
EBITDA	996	1,034	809
Depreciation and amortization	(318)	(272)	(247)
Recurring operating income	678	762	562
Other income and expenses	(27)	(45)	(9)
Operating income	651	717	553
Net income of continuing operations	421	572	428
Net income of discontinued operations	(200)	(587)	(78)
Net income – Group share	220	(19)	347
Earnings per share (in euros)	3.54	(0.31)	5.69

BALANCE SHEET

(in millions of euros unless otherwise indicated)

	2012	2011	2010
Shareholders' equity	2,311	2,217	2,240
Net debt	900	603	94
Gearing	39%	27%	4%
Capital employed	4,039	3,653	3,164
Working capital to sales ratio (in %)*	15.2%	15.0%	13.3%

CASH FLOW

(in millions of euros)

	2012	2011	2010
Cash flow from operating activities	499	543	511
Cash flow from investing activities	(754)	(942)	(281)
Cash flow from financing activities	355	131	161
Capital expenditure (excluding vinyl activities)	438	365	265

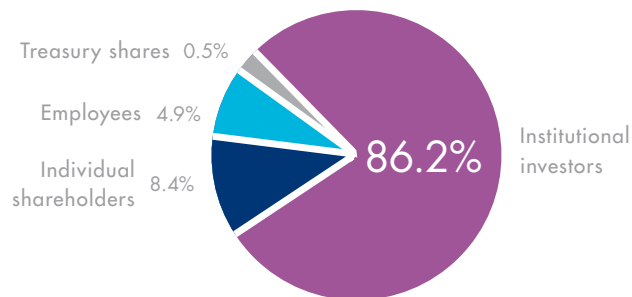
* In 2011, working capital/pro forma sales.

In 2010, working capital including vinyl activities/sales including vinyl activities.

INVESTORS AND SHAREHOLDERS

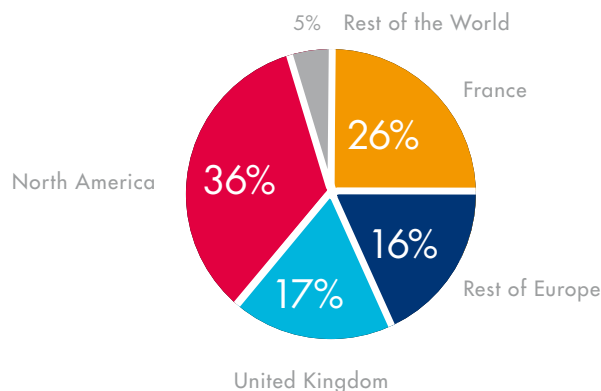
SHARE OWNERSHIP BY TYPE OF INVESTOR

(position on December 31, 2012)



SHARE OWNERSHIP BY REGION

(position on December 31, 2012)



INSTITUTIONAL INVESTOR RELATIONS

Arkema is committed to maintaining active, regular dialogue with institutional investors and financial analysts, through roadshows and conferences. The main purpose of such meetings is to inform the market of our earnings and main transactions and to improve investor and analyst understanding of Arkema, our activities, our strategy and our outlook.

In 2012, the Group held roughly 350 meetings and participated in a dozen conferences in Paris, London, San Francisco, Boston, Amsterdam and Rome.

Arkema also held an Investor Day in Paris on September 18, 2012 attended by some 80 people. This day was the opportunity to present the Group's new profile following the divestment of its vinyl assets, which was finalized in early July 2012, its ambition of becoming a major player in specialty chemicals and advanced materials by 2016 and its vision for 2020.

INDIVIDUAL SHAREHOLDER RELATIONS

The Group meets regularly with individual shareholders, especially at the Annual Shareholders' Meeting, a key opportunity for exchanging on Arkema's strategy and outlook. It holds several meetings with individual shareholders each year in France. In 2012, Arkema met with shareholders in Montpellier, Lyon and Nantes. Our Investor Relations team also talked to a steady stream of visitors at its stand at the Actionaria fair in Paris on November 23 and 24, 2012.

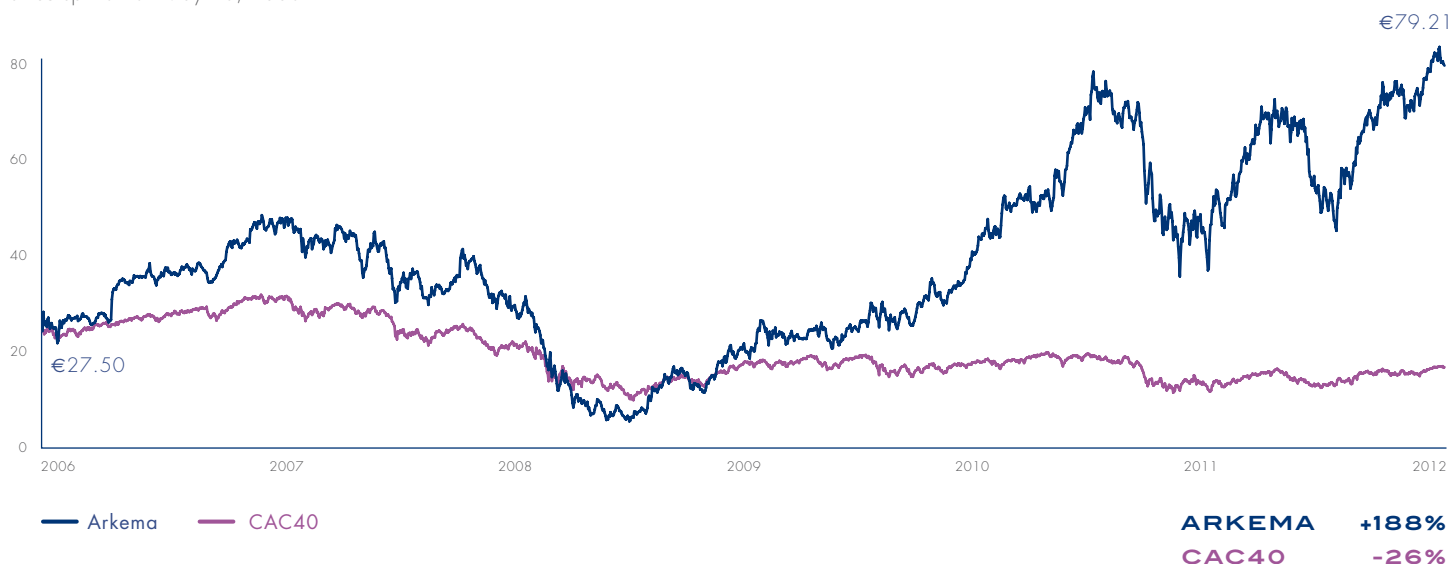
In addition, it offers the members of its Shareholders' Club a series of activities throughout the year to familiarize them with the chemical industry, innovation and everyday chemical applications.

Presentations, interviews, news reports and Shareholder Newsletters are available on our website's Individual Shareholders page.

ARKEMA SHARE

SHARE PRICE CHANGE

since spin-off on May 18, 2006



ARKEMA SHARE PERFORMANCE IN 2012

Performance since January 1, 2012 (situation at December 31, 2012)	+44.8%
Price at year-end (in euros)	€79.21
Average of last 30 closing prices of the year (in euros)	€78.50
Highest price of the year (in euros)	€84.26
Lowest price of the year (in euros)	€46.60

CONTACT

Individual Shareholders

actionnaires-individuels@arkema.com

N°Vert 0 800 01 00 01

Toll-free number from landlines in France

Investors

investor-relations@arkema.com

+33 (0)1 49 00 74 63

CALENDAR

June 4, 2013 • Annual Shareholders' Meeting

August 1, 2013 • First-half 2013 Results

November 7, 2013 • Third-quarter 2013 Results

November 26, 2013 • Meeting with individual shareholders in Bordeaux, France

December 12, 2013 • Meeting with individual shareholders in Lille, France

CSR CHALLENGES AIMING FOR LEADERSHIP

Arkema has always aimed to grow our business and boost our performance while doing our part to promote sustainable development. Our corporate social responsibility, or CSR, policy focuses on five areas: industrial safety, the environment, sustainable innovation, dialogue with stakeholders and employee relations. We aspire to industry leadership in all five areas.





ARKEMA'S SUSTAINABLE GROWTH COMMITMENTS

01

PLACE SUSTAINABLE DEVELOPMENT SOLUTIONS AT THE HEART OF OUR INNOVATION POLICY AND PRODUCT OFFERING

We create innovative solutions that support new energies, help fight climate change, improve access to water, and increase the use of biosourced raw materials.

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As a responsible corporate citizen, **our five core commitments** reflect our desire to uphold the highest standards for safety and the environment and heed the concerns of stakeholders.



GÉRARD LANGLAIS,
Vice President, Sustainable Development

“IN A WORLD FACING A HOST OF ECONOMIC, ENVIRONMENTAL AND SOCIAL CHALLENGES, CORPORATE SOCIAL RESPONSIBILITY (CSR) HELPS CREATE VALUE FOR ARKEMA AND THE SOCIETY WE LIVE IN.”



02

BE A TOP QUARTILE PERFORMER IN SAFETY IN THE CHEMICAL INDUSTRY

Our safety performance has continuously improved since our spin-off thanks to the introduction of a common safety culture across Arkema and a priority emphasis on safety.

> Page 46

“ARKEMA’S CSR GOALS ARE BASED ON STRONG COMMITMENTS THAT REFLECT OUR CHANGING ENVIRONMENT. BY LIVING UP TO THEM, WE PROMOTE THE SUSTAINABLE, RESPONSIBLE GROWTH OF OUR ACTIVITIES.”



LUC BENOIT-CATTIN,
Executive Vice President, Industry

03

REDUCE THE ENVIRONMENTAL FOOTPRINT OF OUR ACTIVITIES

We are committed to a continuous improvement process to cut emissions from our various activities, reduce the consumption of resources, and increase the use of renewable resources. We also ensure that our products do not harm the health or safety of people or the environment.

> [Page 48](#)



04

ENCOURAGE OPENNESS AND DIALOGUE WITH ALL OUR STAKEHOLDERS

Our Common Ground® initiative fosters mutual knowledge and dialogue with all of our stakeholders. We cultivate local relationships to take into account the expectations of communities, especially people living and working near our plants.

> [Page 56](#)

05

PROMOTE THE INDIVIDUAL AND COLLECTIVE DEVELOPMENT OF OUR PEOPLE

Our human resources policies around the world promote the personal development of our employees. We also drive actions focused on improving working conditions for everyone.

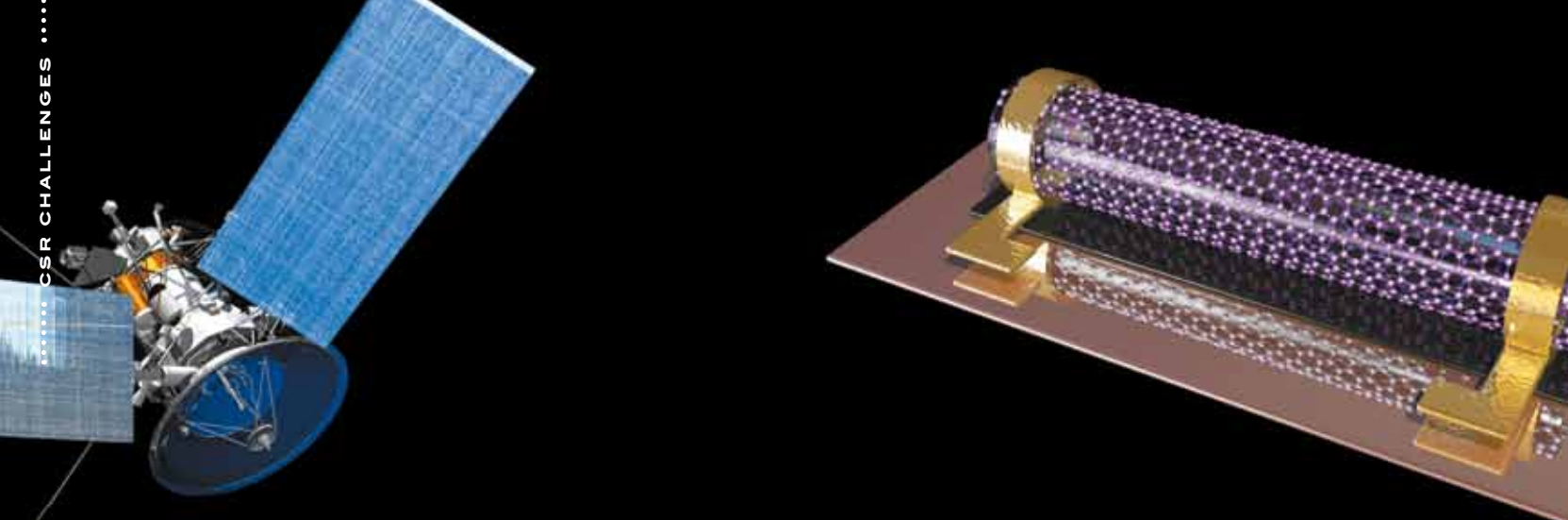
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.....

Meeting these commitments will allow us to achieve our ambition of making a recognized contribution to the sustainable development of the world around us and becoming a best in class global chemical producer, as measured by our financial and corporate social responsibility performance.

.....



TARGETED INNOVATIONS

Chemical manufacturing, a pivotal industry, is both a starting point and an engine for change. By making sustainability a core focus of its innovation policy, it accelerates performance and drives both technological and human progress.



ACCELERATING PROGRESS

The challenges of the modern world — unequal global distribution of drinking water, growing energy needs, dwindling fossil fuel resources and global warming — force us to set priorities for action. Arkema's research focuses on five major areas:

NEW ENERGIES

to help offset declining fossil fuel resources. We are involved in photovoltaics, lithium-ion batteries and the new technology of lithium-sulfur batteries.

RENEWABLE FEEDSTOCK

able to replace petroleum derivatives. We are developing biosourced polymers, made from glycerol and vegetable oils.

WATER TREATMENT

to facilitate access to drinking water for as many people as possible. Our researchers are working on filtration systems based on fluoropolymer membranes and activated carbon.

LIGHTER MATERIALS

which help save energy, especially in transportation. Innovative products in this category include technical polymers to replace glass or metal and thermoplastic composites to make vehicles, ships, wind turbines and, soon, airplanes lighter.

ORGANIC ELECTRONICS

which cut microprocessor size, cost and energy use. Our teams are also working on printing electronic circuits on large or flexible surfaces, so that new functions can be built into packaging, textiles, labels and other items.

**INNOVATION IS EMBEDDED IN ARKEMA'S
CORPORATE SOCIAL RESPONSIBILITY PROCESS.**

TARGETED INNOVATIONS

THE TECHNOLOGICAL CHALLENGE OF LIGHTWEIGHT MATERIALS

Arkema's innovations make vehicles lighter, whittling away at carbon emissions. This underlying trend bodes well for our future: our PMMA⁽¹⁾ replaces glass, our technical polymers and thermoplastic matrix composites offer alternative to metal.



CLEANER CARS

A lot is at stake for automakers and chemical manufacturers. In the 27 member countries of the European Union, new vehicles will have to average less than 95 grams of carbon emissions per kilometer by 2020. *"To achieve that goal in such a relatively short period of time, automakers will have to combine several factors, including aerodynamics, engine fuel efficiency, greater use of electric power and lighter-weight vehicles,"* explains Michel Glotin, Director, Materials Science at Arkema. *"A regular car will have to shed 250 kilograms in the next seven years. And slimming cars by 100 kilograms saves about 0.40 liters of fuel per 100 kilometers, or 5%. Automakers who fail to meet carbon emission targets will be slapped with heavy penalties. Vehicle weight loss goals are roughly the same for Americans, Japanese, South Koreans and Chinese, which means that automotive industry suppliers – Arkema's customers – must roll up their sleeves right now to be ready in time."*

INNOVATIVE MATERIALS

A vehicle part made out of technical plastic weighs one-sixth that of a metal part. For a few years, Arkema offers Rilsan® HT, a high temperature resistant polyphthalamide. Rilsan® HT has already established itself as a cost-effective lightweight alternative to metal in the manufacturing of technical parts and tubes for under-the-hood applications. Arkema is now working to develop new thermoplastic matrix composites that will supplant metal parts. *"These composites offer the same weight savings over metal as thermoset composites. Plus, they're easier to recycle. Thermoplastic composites strike us as the best solution for replacing the metal in autobodies, which is the key to lighter vehicles,"* stresses Michel. Arkema is coordinating the 15-partner Compofast project to develop thermoplastic composite products that meet the cost and production requirements of series-produced cars. This brand-new Arkema activity has enormous potential. Thermoplastic composites make up less than 5% of today's composites market, but they could eventually account for more than half of it.

1. Polymethyl methacrylate, a polymer classified as an organic glass.

ALTUGLAS® FOR LIGHTWEIGHT WINDOW GLASS

One current trend is to trade some of the glass in vehicles for a polymer. The best example, hands down, is Twizy, Renault's tiny electric car whose sunroof and side spoilers are made of Altuglas® ShieldUp, Arkema's light, transparent, scratch-resistant PMMA.

"The weight cut from the roof is already a big improvement. PMMA is half the weight of glass. In the future, we'll be able to replace other glass parts such as the side or rear windows, even though we do still have some serious limitations to work around," predicts Michel. "And that's true not just for cars, but for trucks, buses and recreational vehicles too."

FOCUS

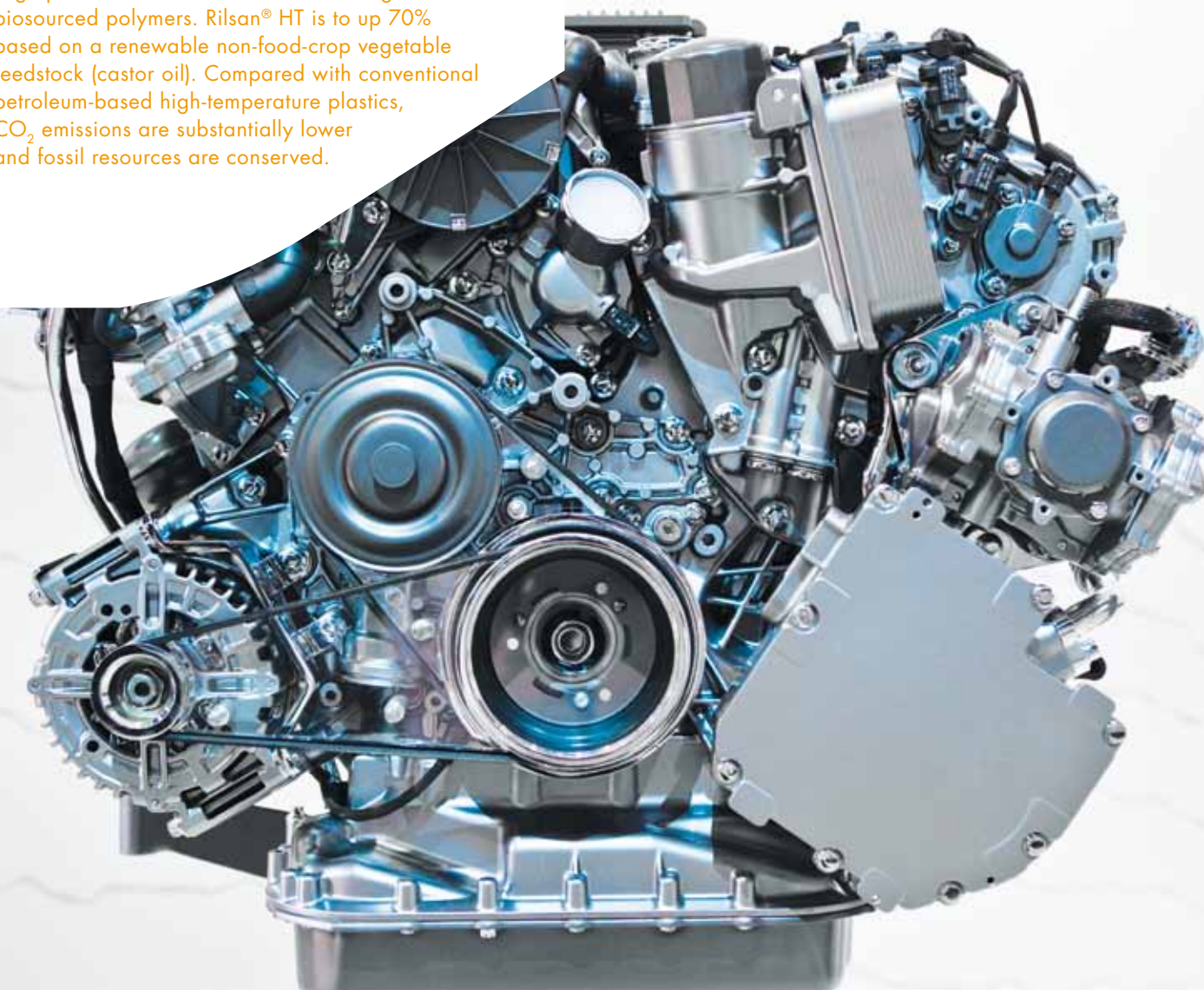
RILSAN® HT'S ENVIRONMENTAL ADVANTAGE

High performance does not exclude using biosourced polymers. Rilsan® HT is to up 70% based on a renewable non-food-crop vegetable feedstock (castor oil). Compared with conventional petroleum-based high-temperature plastics, CO₂ emissions are substantially lower and fossil resources are conserved.

GOOD TO KNOW

ALTUGLAS® ACCLAIMED

Our innovation is not just popular with automotive and aircraft makers – the scientific community has also recognized it. The Altuglas® ShieldUp PMMA won the 2012 Pierre Potier Prize, awarded to chemical innovations that promote sustainable development.



COMPLEMENTARY EXPERTISE



“ The lightweight materials market offers us new opportunities in the automotive market. We’ve been a PPE (French *Pôle Plasturgie de l’Est*) partner for 12 years have leveraged excellent synergies with Arkema right from the start. We’ve decided to jointly develop an injection process for a new resin, for the automotive market. We have already achieved outstanding results in lightening materials with Arkema. It is a key partner in these new developments. ”

GILMAR LIMA,
Chief Executive Officer of
Brazil’s MVC Soluções em Plásticos



“ Our partner Arkema got into continuous fiber composite materials in a novel way. Arkema loaned its research centers to *Pôle de Plasturgie de l’Est* (PPE), a technology cluster specializing in composites, to develop a resin suitable for existing processes. Arkema applies its chemical expertise to the commercial scale-up process — PPE’s specialty — instead of the other way around. It tackled these process requirements and our specifications, including goals related to production time and mechanical properties at high temperatures, up front. ”

JEAN-PIERRE CAUCHOIS,
Technical Director, PPE



“ Chomarat’s know-how in glass fiber- and carbon-based technical fabrics and knowledge of the composite materials market complements Arkema’s skills and expertise in polyamide and acrylic resins usable as thermoplastic composite matrices. As a team, we have the expertise to create materials that work well together and meet customer specifications. Another plus is the innovative approach of Arkema, which is to develop resins that can work with existing composite processes. We’re interested in Arkema’s innovative method, which gives us a chance to develop a new line of products: thermoplastic prepreg rolls or sheets that manufacturers can then process directly into their own products. ”

PHILIPPE SANIAL,
R&D Manager, Chomarat

A REAL GRASP OF INNOVATION

“A SUPPLIER OF HIGHLY ENGINEERED POLYMERS, ARKEMA HAS A REAL GRASP OF INNOVATION, TECHNOLOGY DEVELOPMENT AND HOW TO MEET OUR EXPECTATIONS AS A CUSTOMER. THE COMPANY IS WELL ORGANIZED AND HAS SURROUNDED ITSELF WITH PARTNERS THAT HAVE EXPERTISE IN BOTH SCIENCE AND PROCESSES, LIKE PPE. ARKEMA IS ALSO APPLICATION-MINDED AND HIGHLY RESPONSIVE, WHICH ENABLED US TO JOINTLY BRING TO FRUITION PROJECTS SUCH AS TWIZY.”



GÉRARD LIRAUT,

Expert Leader, Polymers,
Characterization
and Processing, Renault



LIGHTER AIRCRAFT

Lighter and therefore greener, Airbus and Boeing airplanes continually strive to outdo one another in ingenious fuel-saving solutions. Every kilogram shed translates into substantial savings. The lighter an aircraft, the less jet fuel it uses to travel an equal distance. The arrival of the Airbus A350 and Boeing 787, each with a fuselage made from carbon composite instead of aluminum-lithium alloy, ushered in a new era in the aerospace market. Today, 52% of the materials used to make these new aircraft are composites, versus around 25% in previous-generation airplanes.

The advantage is a lighter aircraft than one built of aluminum. The use of composites is sure to grow. Arkema sees a challenge: replacing thermoset matrix composites with highly engineered thermoplastic matrix composites such as Arkema's polyether ketone ketone (PEKK) and carbon fiber. The advantage would be a competitive price and faster production times, since the curing time of thermoset composites cannot be shortened.

TARGETED INNOVATIONS

NEW HORIZONS IN ELECTRONICS



A very promising growth sector, high-value-added electronics has spawned new avenues for Arkema's chemical expertise. Our nanostructured polymers take microelectronics miniaturization to the next level and our electroactive materials provide the foundation for new functions and sensations.

By diving into this brand-new, high-tech branch of electronics, we have been able to discover untried markets for our performance products.

Arkema's electronics adventure began in 2010, when we acquired Piezotech, a company that specializes in piezoelectric fluoropolymers for electronics. Our new ventures got a second boost when Ian Cayrefourcq, lured away from the semiconductor industry, took over as Arkema's Director of Emerging Technologies in 2011.

In April 2012, Arkema expanded its existing photovoltaics partnership with the French Atomic Energy & Alternative Energy Commission (CEA) to include two joint laboratories devoted to microelectronics and organic electronics. We forged an alliance with two CEA research institutes, Leti, specializing in semiconductors, and Liten, an organic electronics expert.

At the same time, we began working with LCPO, an organic polymer chemistry lab, on electronics materials in Bordeaux, and with Professor Georges Hadziioannou, head of the Excellence Chair, on advanced materials for information and communication technologies and energy. This close working partnership is dedicated to pioneering innovative products and applications.

"Electronics, a fast-growing market, offers us new opportunities for 2020. Branching out into it should spur Arkema's growth by expanding applications for technologies we're already proficient in. We want to capitalize on our strong technical expertise and recognized global leadership in fluoropolymers and block copolymers. This is how we enhance our already excellent credibility with leading semiconductor customers," explains Ian Cayrefourcq.



LAURENT MALIER,
Chief Executive Officer of French
research institute CEA-Leti

“CHEMICAL ENGINEERING IS CRUCIAL TO ELECTRONICS INNOVATION AND MINIATURIZATION. THE STRIDES OF THE LAST 10 YEARS HAVE COME NOT JUST FROM MINIATURIZING COMPONENTS MADE OF THEIR ORIGINAL MATERIALS, BUT FROM INCORPORATING NEW MATERIALS AND NEW CHEMICAL PROCESSES.”

GOOD TO KNOW

ELECTROACTIVE POLYMERS

Piezoelectric fluoropolymers produce electricity when subjected to deformation or pressure. Such electroactive polymers are being developed at Arkema by Piezotech.



Using well-honed technologies, Arkema has found new ways to make electronics, using three major processes: nanolithography, flexible electronics and printed electronics.

Nanolithography for Printed Circuits

Optical lithography on silicon has reached its limits in electronics, unable to maintain resolution below a certain level. Research to break through that barrier by further shortening wavelengths to so-called extreme UV levels is lagging, stymied by very complex technical challenges. Arkema is working with Leti and LCPO to develop a parallel solution based on the capacity of certain block copolymers to self-assemble into periodic nanoscale patterns. Block copolymer technology can produce nanostructures on the scale of a few to a few dozen nanometers. These geometric designs can be very precisely modulated depending on the chemistry and architecture of the blocks. Arkema's expertise in self-assembled block copolymers will make it possible to obtain extreme resolutions, on the order of 10 nanometers, to produce the patterns of future electronic circuits.

FOCUS

FROM MICROELECTRONICS TO NANOELECTRONICS

"We're exploring a polymer chemistry approach with Arkema, to produce patterns on a nanometric scale (a millionth of a millimeter)," explains Laurent Malier, Chief Executive Officer of French research institute CEA-Leti. "By using certain materials developed by our partner, we should be able to design patterns structured and organized on a 10-nanometer scale, which would greatly simplify the production process for integrated microelectronic circuits. The fact is, some steps are very critical and very expensive, especially the production of the finest and tiniest patterns. Nanolithography using self-assembled block copolymers is a highly promising innovation for microelectronics."



Flexible Electronics

Another electronics development for Arkema is flexible electronics. Electroactive polymers, developed by Piezotech, an Arkema subsidiary, have application as sensors, memories and microactuators. Their highly specific properties allow them to be integrated into electronics systems as active printed materials. *"We're developing both substrates and ink formulations compatible with the different printing techniques. For Arkema, it's a fairly new thing to have to match our products' qualities to the end requirement. We have entered the domain of electronics, where the smallest impurity knocks you out of the game. Organic, or printed, electronics requires ultra-high-quality materials and formulations that meet very strict specifications, so that they can be used in clean rooms, for example. The value added from such materials is quite high,"* stresses Fabrice Santos Dominguez, Head of Piezotech.

Arkema is also developing electroactive terpolymers that offer specific hardness and deformation properties under stress. This makes them especially practical for applications based on deformations such as microfluidics (micropumps), optics (mobile phone lenses) and haptics. Haptics, or tactile feedback, bears the same relationship to touch as optics does to sight, emitting a tiny, localized vibration when users press a precise spot on their tablet or smartphone.

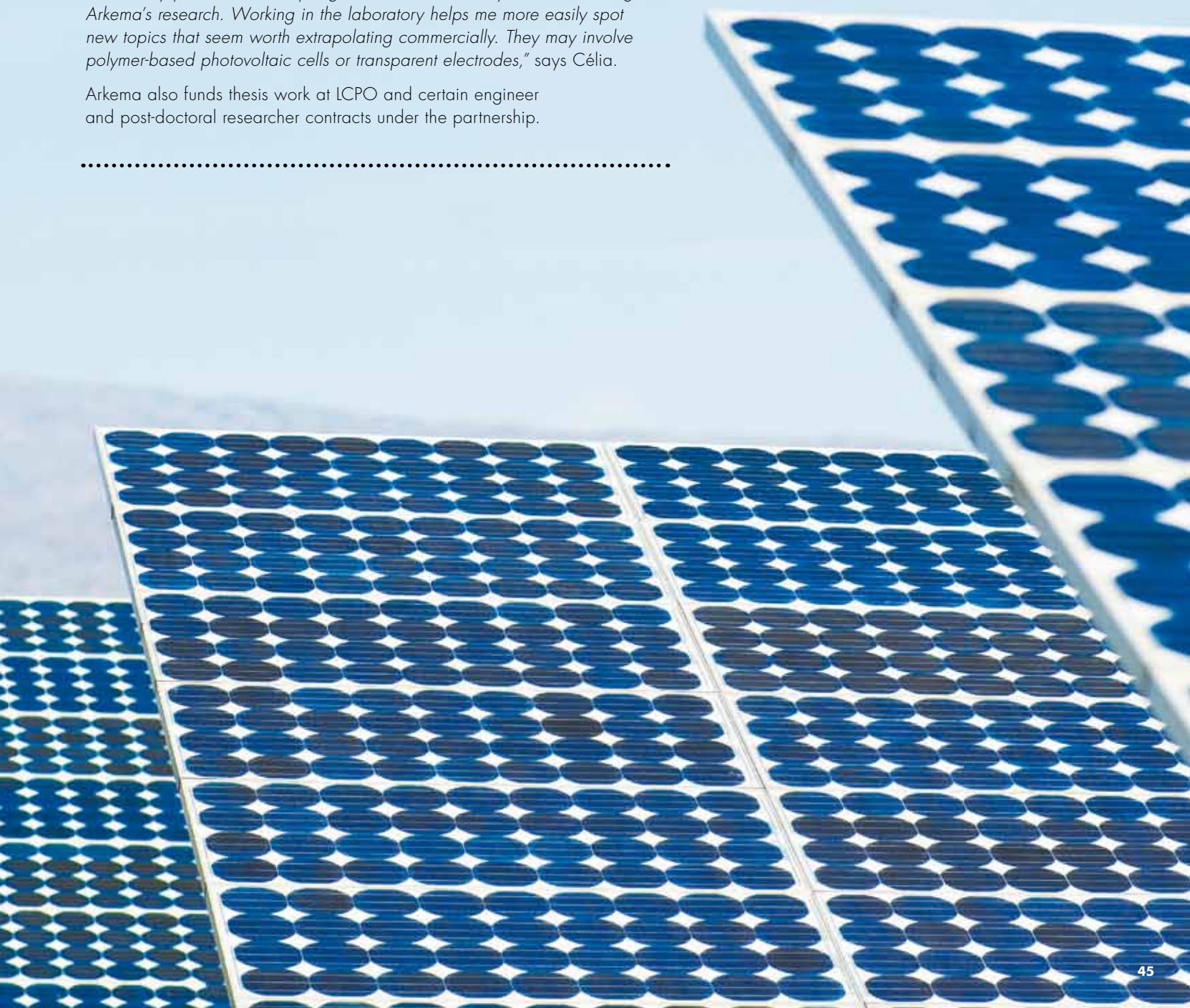
Arkema got into printed electronics by creating a joint laboratory with Liten. Our job is to formulate the inks, while our partner's is to deposit them on flexible substrates. The goal is to develop both piezoelectric inks and conductive inks. Electronic devices such as sensors, memories, transistors and displays are made using printing techniques that go back to Gutenberg, on very-large-surface polymer films at high speeds, keeping costs ultra low. Printed media embedded with sensors can, for example, serve as smart labels, which provide practical information to users. Everyday packaging may soon contain sensors that communicate temperature, impact, humidity and more.

FOCUS

REWARDING COLLABORATION WITH THE BORDEAUX EXCELLENCE CHAIR

Besides being able to tap the organic electronics expertise of employees of the LCPO organic polymer chemistry lab, which has cutting-edge characterization resources and access to state-of-the-art equipment, we benefit from our partnership with the lab in other ways. Célia Nicolet, a research engineer at Arkema, has been on loan to LCPO since October 2012. *“My job is to create synergies with the laboratory while advancing Arkema’s research. Working in the laboratory helps me more easily spot new topics that seem worth extrapolating commercially. They may involve polymer-based photovoltaic cells or transparent electrodes,”* says Célia.

Arkema also funds thesis work at LCPO and certain engineer and post-doctoral researcher contracts under the partnership.



SAFETY IN 3 DIMENSIONS

6

ESSENTIALS ALREADY IN FORCE

Introduced starting in 2011 at a rate of three per year, the first six Essentials are now in effect worldwide:

1. Places of work will be kept clean and orderly.
2. Traffic rules and regulations will be observed both inside and outside the sites (vehicles, bicycles, pedestrians).
3. Only those people with authorization are allowed in restricted areas.
4. Anyone present in a restricted area related to opening of hazardous product lines will wear the appropriate personal protective equipment prescribed by the work permit.
5. All plant changes will be subject to a risk analysis and must have an approved management of change (MOC) review.
6. No one under the influence of alcohol or drugs is permitted on site, and no consumption of alcohol or illegal drugs is permitted in the workplace.

Safety is a fundamental value and focus at Arkema. Our goal is clear: to have one of the best safety records in the industry.

Preventing major risks, management systems and workplace safety are the three dimensions of industrial safety. All three must advance together to keep performance at the highest level.

Managing Industrial Risk

We pay close attention to analyzing the risks associated with our activities, especially at Seveso II-classified sites or sites presenting an equivalent level of risk, all over the world. We also consider internal and external feedback about incidents and accidents and best practices for managing industrial risks extremely important.

Arkema assesses risks by methodically studying production processes, operating conditions at plants, transportation (especially of hazardous materials), new facility design and construction, existing facility upgrades and workplace health and safety.

AIMS, an "All-in-One" Audit

The Arkema Integrated Management System (AIMS) combines in a single audit all the safety, environmental and quality audits we perform. It includes requirements specific to Arkema and requirements we endorse, such as the ISO 9001, ISO 14001 and OHSAS 18001 standards. AIMS audits are performed by mixed teams of Arkema auditors and auditors from an outside certification organization, DNV Business Assurance France, in order to earn external certifications. They are conducted once every three years and supplemented by a follow-up audit each year.

The AIMS method is gradually being adopted by all Arkema sites. Deployment began in France, from 2007 to 2010, then moved to the United States in 2011 and China in 2012. The rest of Europe will follow suit between now and 2016.

FIGURES



42%

In 2012, 42% of our sites were audited using the AIMS method.

2020 GOALS

Our 2020 goal is for all sites to have completed an AIMS audit in the last three years.



47%

In 2012, 47% of Arkema sites had set up a program to improve safety through peer observation of the way tasks are performed.

2020 GOALS

Our goal for 2020 is to have this program in place at all Arkema sites.



Getting Everyone Involved

We believe that improving our industrial safety performance depends on creating a safety culture shared by all. We have deployed Safety in Action to heighten the safety awareness of all our employees and the Essentials – a set of rules that must be followed without compromise – globally.

Safety in Action is a program to motivate and support behavioral change. It affirms our dedication to fostering constant safety vigilance and spurs people to get involved both as individuals and collectively. Our “High Points” provide a regular forum for discussions about safety. They have led, and continue to lead, to the preparation of action plans for each work situation and prompt teams to identify areas for improvement.

“Our 14 Essentials are simple, clear safety rules that address everyday situations brought to our attention through feedback,” explains Paul Leonard, Vice President, Safety and Environment. *“Everyone must be familiar with them and follow them without compromise, at all Arkema sites.”*

To heighten risk awareness and bring down the number of accidents, Arkema is implementing peer observation of behavior in high-risk situations. This field initiative leverages positive experiences and a joint search for solutions to improve practices. Each site tailors the process to its own requirements (type of activities and risks), using a structured observation method. Employees are then asked to observe one another as they do their jobs. The method helps identify best practices and deviations from them, as well as high-risk situations. Used successfully in the United States, peer observation is now being deployed in Asia and Europe. It will gradually be adopted at all Arkema sites.



THOMAS VALTIER,
Business Development Manager,
DNV Business Assurance France

“THE AIMS METHOD IS AN INNOVATIVE CERTIFICATION APPROACH, WHICH ALIGNS ALL SAFETY, ENVIRONMENTAL AND QUALITY MANAGEMENT PROCESSES.”

Performance Improvements

Instilling a shared safety culture across Arkema has steadily improved our safety performance since the company was spun off.

LTIR TRENDS
Lost-Time Injury Rate



TRIR TRENDS
Total Recordable Injury Rate



GROUP GOALS
Our goal is to achieve a TRIR of 2.0 by 2020 at the latest.

MINIMIZING OUR ENVIRONMENTAL FOOTPRINT

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Arkema has made protecting the environment an integral part of our management system. Shrinking our environmental footprint is one of our five CSR objectives. We are adjusting our production practices to trim our emissions and optimize and reduce our consumption of non-renewable resources. Arkema is focusing on four major topics: climate change, energy use, air emissions and discharges to water.

RESPONDING TO CLIMATE CHANGE

Greenhouse gases actively contribute to global warming. Arkema has made a commitment to decrease the greenhouse gases emitted by our production units.

The Intergovernmental Panel on Climate Change (IPCC) is now convinced that the warming trend of the last 50 years is caused by human activities. Emissions of certain greenhouse gases, including carbon dioxide, have lasting effects on the composition of the atmosphere, pushing up the global temperature and sea levels.

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GREENHOUSE GASES

Millions of metric tons of carbon dioxide equivalent



Our total greenhouse gas emissions fell by close to 47% between 2006 and 2012.

CURTAILING GREENHOUSE GAS EMISSIONS

To tackle climate change, we have pledged to cut our production facilities' greenhouse gas emissions. We have replaced steam generators with more efficient models to mitigate carbon emissions and added units to thermally treat the emissions produced by our fluorogas production facilities at the Pierre-Bénite, France and Changshu, China plants. We have made significant strides. Between 2006 and 2012, our total greenhouse gas emissions fell by close to 47%.



GARY GAO,

Gary Gao, HSE-Q Dep.,
Arkema China Investment Co., Ltd.
Changshu Branch.

A REDUCTION OF MORE THAN 90% AT THE CHANGSHU SITE

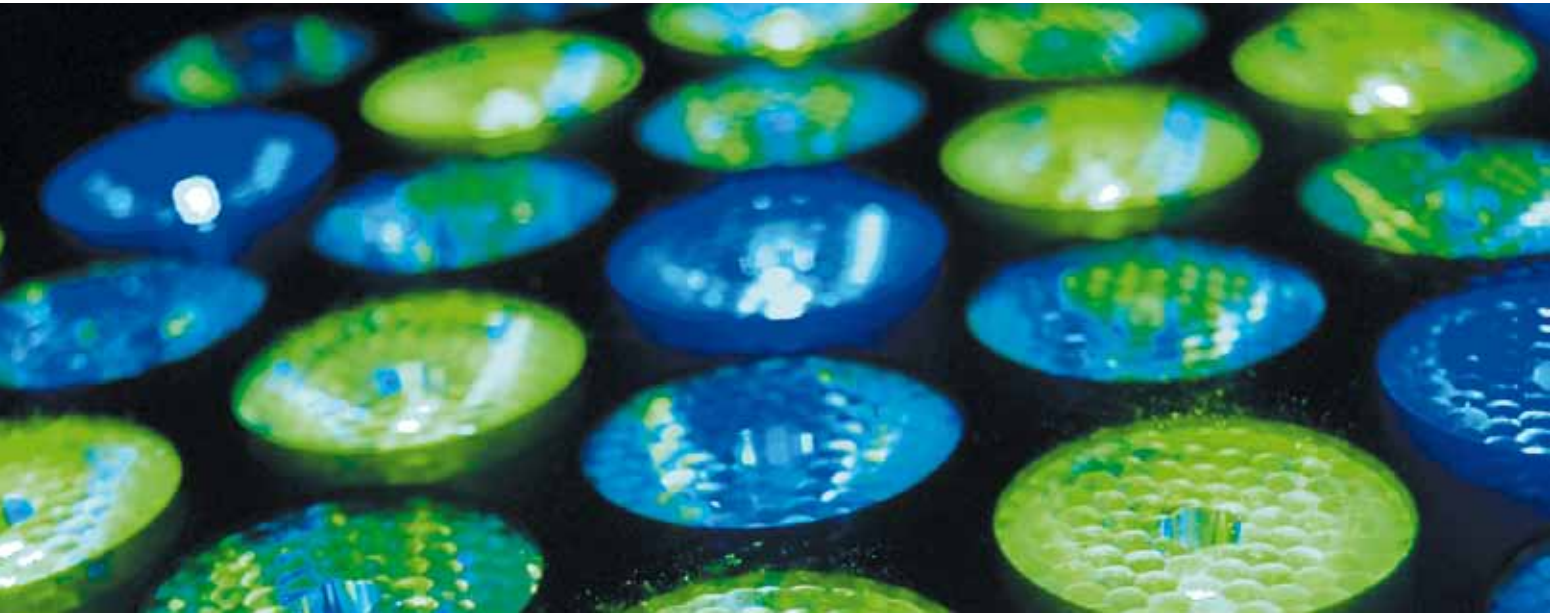
At our Changshu fluorogas production plant in China, we invested in the capture of its gas emissions and in equipment to incinerate this gas in 2008 and again in 2010, when new units were commissioned.

As a result, the Changshu site slashed its greenhouse gas emissions by more than 90%, expressed in tons of carbon dioxide equivalent, between 2006 and 2012.

“ARKEMA IS ONE OF THE COMPANIES KEEN TO REDUCE THEIR POTENTIAL ENVIRONMENTAL FOOTPRINT IN CHINA AND DEMONSTRATES IT BY ITS ACTIONS ON THE CHANGSHU PLATFORM.”

ENVIRONMENTAL FOOTPRINT

USING LESS ENERGY



Controlling energy costs is a major Arkema goal, enshrined in our sustainable development strategy.

Global energy use shot up by around 120% between 1970 and 2010. At that rate, demand is expected to double again by 2050. But the fossil energies that fueled industrial development and are necessary in the transportation and heating sectors will eventually run out.

ARKENERGY, A LONG-TERM SAVINGS PROGRAM

We strive to optimize energy use by our production processes and facilities. Rolled out several years ago, our Arkenergy program features two kinds of initiative: operational and facility maintenance best practices and capital spending to cut energy use. In the last several years we have invested in equipment such as more efficient compressors and motors, speed controllers, heat exchangers, pre-heaters, heat recovery systems for steam generators and more efficient burners. The monitoring and repair of pipe insulation, steam traps and compressed air systems have also yielded energy savings.

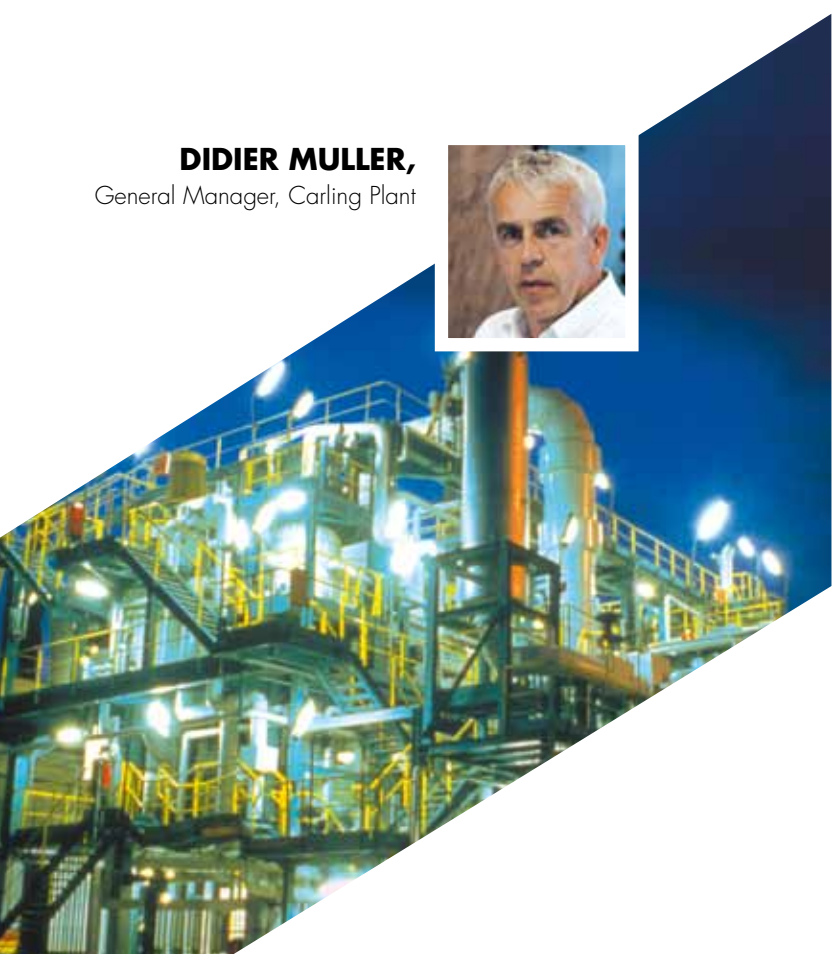
In some cases, swapping incandescent for LED bulbs in some areas, replacing doors and windows, and installing thermostats in storage areas have also had a positive, albeit smaller, impact.

ENERGY PURCHASES DOWN 4% FROM 2010 TO 2012

Restating data for net energy purchases in the last few years, on a comparable scope of business, leads to the evolution shown on the graph aside.

“THE SPECIAL FUEL USED MAKES THIS STEAM GENERATOR UNIQUE, AND IT TOOK A LOT OF WORK TO DEVELOP. NOT ONLY DOES IT IMPROVE THE FACILITY’S ENERGY BALANCE, IT ALSO ILLUSTRATES CARLING’S COMMITMENT TO ENHANCING ENVIRONMENTAL PERFORMANCE.”

DIDIER MULLER,
General Manager, Carling Plant



NET ENERGY PURCHASES

(in TWh)



Arkema has trimmed net energy purchases by about 4% in the last two years.



THE CARLING PLANT WINS A RESPONSIBLE CARE® AWARD

Recycling waste and byproducts as fuel is one way we are cutting our fossil fuel use. Our Carling plant’s investment to recycle waste into alternative fuel is a good example.

In 2012, the Carling, France facility acquired a new steam generator that runs on heavy ends from the production of acrylic monomers. The heavy ends are recycled as liquid fuels right on site, to generate the steam the production units need to operate. This reduces the need for the fossil fuels — gas and fuel oil — Carling formerly used to generate its steam.

And flue gas scrubbing rounds out the emissions control process.

The French trade association for chemical manufacturers, *Union des Industries Chimiques* (UIC), has already recognized the new equipment’s environmental efficiency, presenting the Carling plant with a regional Responsible Care® Environment award on July 20, 2012.

ENVIRONMENTAL FOOTPRINT

IMPROVING AIR QUALITY

Limiting air pollution is vitally important to our future given the consequences for people, plants and wildlife and the environment.

Volatile organic compounds (VOC) contribute to ozone formation in the lower atmosphere and are therefore air pollutants. As a super-oxidant, tropospheric ozone is, in fact, a major air pollutant above a certain concentration. It can irritate people's eyes, mucous membranes and upper respiratory tract.

WE HAVE REDUCED OUR VOC EMISSIONS 20% SINCE 2006

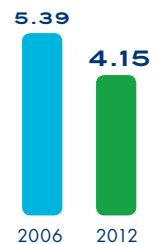
Our top priority is limiting our emissions of the most polluting compounds, namely VOCs. To reduce them, Arkema is capturing and treating VOC-containing effluents. The most common treatment methods are installing thermal oxidizers and cleaning air vents. We also regularly look for leaks and eliminate the emissions we find.



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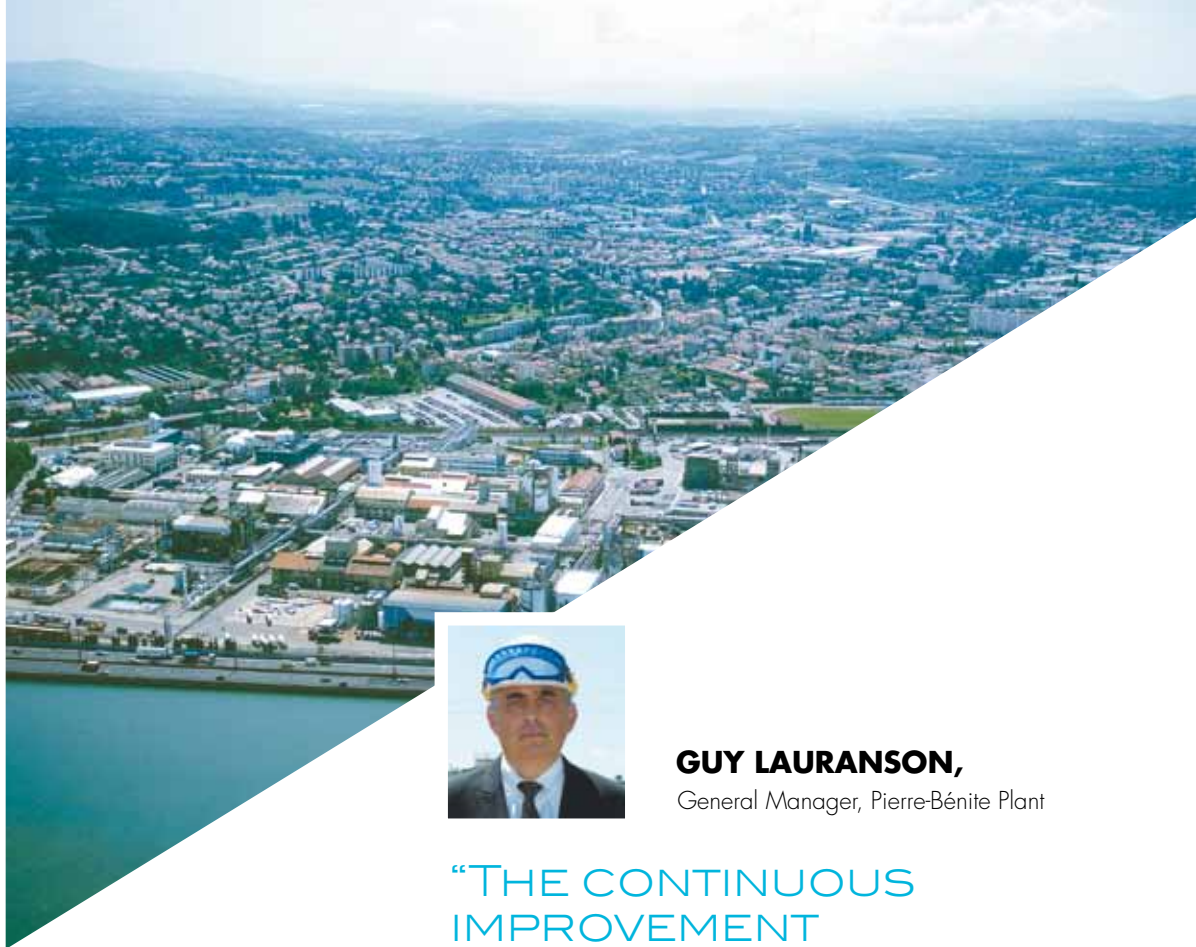
VOLATILE ORGANIC COMPOUNDS

(Thousands of metric tons)



We have reduced our emissions of volatile organic compounds by about 20% between 2006 and 2012, excluding the activities sold or acquired in 2012.

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GUY LAURANSON,
General Manager, Pierre-Bénite Plant

CUTTING VOC EMISSIONS AT PIERRE-BÉNITE BY A FACTOR OF MORE THAN 2.5

The Pierre-Bénite plant in France, which makes polymers and fluorogases, invested in a number of capital improvements from 2006 to 2012 to curtail its VOC emissions. Outlays went toward upgrading the incinerator to improve reliability, a system to capture emissions from vents and route them to the incinerator, and the capture of emissions during packaging, loading and unloading operations.

Thanks to this equipment, the Pierre-Bénite plant's VOC emissions were reduced by a factor of more than 2.5, on a like-for-like production basis, between 2006 and 2012.

“THE CONTINUOUS IMPROVEMENT PROCESS IMPLEMENTED IN THE LAST FEW YEARS AT ARKEMA'S PIERRE-BÉNITE PLANT HAS SHARPLY MITIGATED THE FACILITY'S IMPACT ON ALL ENVIRONMENT-RELATED ASPECTS, INCLUDING AIR, WATER, SOIL AND WASTE. ASSOCIATED INVESTMENTS IN EQUIPMENT, SET FOR COMPLETION BY 2015, WILL SHRINK THE PLANT'S ENVIRONMENTAL FOOTPRINT EVEN MORE.”

ENVIRONMENTAL FOOTPRINT

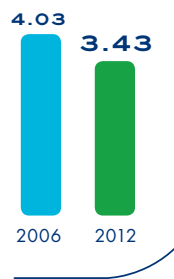
PROTECTING RIVER BIODIVERSITY

The discharge of wastewater can harm aquatic life. Protecting river biodiversity requires treating polluting effluent before it reaches the water.

Water must contain oxygen at all times for aquatic life to survive and thrive. The gaseous oxygen dissolved in water comes from rainfall, the oxygen in the air and algae photosynthesis. The organic compounds discharged into water by human and industrial activities choke off some of its oxygen. Chemical oxygen demand (COD) is an indicator of how much oxygen is needed to break down the organic compounds present in water. It is used to assess the amount of pollution in wastewater. In river water, a COD that is too high indicates that it does not have enough oxygen to support the growth of aquatic species.

CHEMICAL OXYGEN DEMAND

Thousands of metric tons of oxygen



Arkema reduced the chemical oxygen demand of effluent discharges by more than 10% between 2006 and 2012.

TREATING EFFLUENT AND REDUCING DISCHARGES

Reducing our discharges into water is a major Arkema environmental protection goal. We do a number of things to minimize high-COD discharges through routine effluent treatment. Examples include:

- locating our units in multi-business clusters equipped with treatment plants,
- phasing in physicochemical and/or secondary (biological) treatment plants at our standalone sites,
- optimizing wastewater treatment processes or managing the water sent to wastewater treatment plants more effectively.





A 45% LOWER COD FOR RHO PLANT DISCHARGES

The Rho plant in Italy, which makes polymethyl methacrylate (PMMA), has a reverse osmosis wastewater treatment unit that concentrates and recovers organic feedstock (methanol and methacrylic acid) that would otherwise be lost in process wastewater and create chemical oxygen demand.

However, reverse osmosis wastewater treatment produces permeate (non-concentrated water) that can continue to be discharged, though in smaller quantities. In 2009, we invested in a system to re-circulate the permeate (or “product water”) to reintroduce it into our production plant. It enabled the Rho plant to lower the COD of its aqueous discharges by 45% from 2010 to 2012, compared to discharges over the 2006-2008 period.

“PRO-SUSTAINABILITY EFFORTS HAVE ALWAYS BEEN FRONT AND CENTER AT THE RHO PLANT. OUR EMPLOYEES THERE ARE UNUSUALLY SAVVY ABOUT THE ENVIRONMENT, AND EVERY OPPORTUNITY TO REDUCE THE SITE’S ENVIRONMENTAL IMPACT IS CAREFULLY STUDIED. EXPERIENCE HAS, IN FACT, TAUGHT US THAT A DETAILED ANALYSIS OF FACILITIES OFTEN LEADS TO SIMPLE AND VERY EFFECTIVE SOLUTIONS.”



PIER-LUIGI DELLI,

Manufacturing Director for Altuglas International
(Arkema’s PMMA Business Unit)



REACHING OUT TO THE PUBLIC

It is important to us to talk to all of our stakeholders about Arkema's activities and products. We are especially active in initiatives to promote a positive view of the chemical industry. Telling people about what we do and how chemicals impact everyday life, sparking and nurturing vocations, and showcasing the benefits of innovative chemistry are the goals of our Common Ground® initiative and our relations with schools and universities.

GILLES GALINIER,
Vice President, External Communications

“ARKEMA REACHES OUT TO YOUNG PEOPLE ALL OVER THE WORLD, TO SHOW TOMORROW'S ADULTS HOW CHEMISTRY ADDS TO THEIR EVERYDAY LIVES.”

Earning Trust

We do everything we can to reach out to people living and working near our plants, engaging in dialogue, explaining and informing. Arkema aims to be open and to listen, to earn trust. Common Ground®, our local communication outreach initiative, focuses on our plants' operation, risk management, our products and their everyday applications, and innovations.

Common Ground® sponsors a host of initiatives, including open houses, plant tours, public information meetings, exhibitions, safety days, talks at schools, support for local non-profits and plant anniversary celebrations. Nearly 300 such events are held by Arkema each year around the world. In 2012, 70% of our companies participated actively in Common Ground® events.

Sparking Vocations

In the United States, we have created the Arkema Inc. Foundation to promote social, cultural and educational initiatives near our industrial facilities. One example is the Science Teacher Program, intended to encourage elementary schools to explore the sciences more widely. Teachers attend a special course designed and taught by Arkema engineers and technicians and then share what they've learned with thousands of students. In 2012, 63 U.S. elementary school teachers enrolled in the course.

The ENSIC Foundation in France, created in 2008 with Arkema's support and associated with Ecole nationale supérieure des industries chimiques, a chemical engineering school based in Nancy, aims to broaden access to the school by awarding scholarships to low-income students. In 2011 and 2012, the Foundation provided support to 20 students.



In China, Arkema is a partner of the Sino-French Program in Chemical Sciences & Engineering sponsored by the *Fédération Gay-Lussac*, a federation of chemistry and chemical engineering schools in France, and the East China University of Science and Technology (ECUST) in Shanghai. The program aims to educate chemical engineers who will feel at home in both French and Chinese culture. Arkema twice hosted students from the first ECUST/ *Gay-Lussac* graduating class in 2012, once at our Shanghai site and the second time at our Pierre-Bénite site in France.

Chemistry and the Environment Share the Limelight

Arkema has partnered since 2011 with the *Palais de la découverte* science museum in Paris, to showcase a cutting-edge, innovative chemical industry able to provide sustainable solutions to twenty-first century challenges. An ultra-modern chemistry lab

has been set up in the museum to host a whole slate of experiments and exhibitions entitled "Amazing Chemistry." Inspired by Arkema innovations such as biosourced polymers, solvent-free paint, self-healing rubber and solutions for renewable energy, the events hosted by the museum's science facilitators have allowed more than 20,000 visitors to explore how chemistry helps drive sustainable progress, in a fun, interactive way.

In China, Arkema is a partner of the Albatross Foundation, an international non-profit that educates children about environmental protection. On April 16, 2012, 14 Arkema employees helped Albatross reach 250 students, each of whom was given an educational book published by the program, at the Qiangwei elementary school in Shanghai.

Each year Arkema France participates in the Chemistry Village (*Village de la Chimie*), which attracted 7,000 people in 2012. Visitors had a chance to peruse everyday objects made possible by chemistry, ranging from athletic shoes to mobile phone screens, game consoles and sunglasses. They also learned about the different types of jobs available in the chemical industry, career advancement opportunities and the diverse career paths that can be pursued at companies.



NURTURING OUR HUMAN CAPITAL

Arkema's people are unique in terms of their know-how, professional fields, nationalities, roles and personalities, and are our greatest asset. In line with our values of simplicity, solidarity, performance and accountability, we prize the cultural openness of the men and women we employ, their skill at teamwork and their entrepreneurial spirit. Our recruitment, compensation, training and career management policies create an environment conducive to their personal development.

Broadening and Sharpening Skills

Employee skills and know-how are vital capital for any business. Arkema develops this capital through effective career management, diversified training programs and fair recognition of performance.

We apply the same career management policy for everyone at Arkema, regardless of their category (manager or non-manager), country, age or gender. It is a cornerstone of human resources development at Arkema, diversifying the career experiences of employees and broadening and sharpening their skills. It is based on several principles, including giving everyone the resources and support they need to take charge of their own career, being proactive about promoting from within, facilitating functional and geographic mobility, and spotting and developing potential to encourage people to take on new responsibilities.

Equal Opportunity at Work

In hiring, compensation and career management, Arkema has a clear policy of combating all forms of discrimination. We focus especially on promoting equality between men and women.

An agreement on gender equality in the workplace was signed by Arkema France, which also signed the Parental Rights Charter, a commitment by French businesses to better accommodate the needs of their employees with children. In the United States, Arkema Inc. has prepared an action plan to promote equal opportunity and pay for all equally qualified employees and jobseekers, regardless of race, ethnicity, national origin, religion or gender.

Arkema has hiring guidelines that reiterate the principles of fairness and non discrimination in applicant selection. To facilitate application submission and standardize hiring processes, we use a dedicated tool on our website shared by Arkema units around the world.

Promoting Health and Well-Being in the Workplace

Arkema pays close attention to working conditions. To protect employee health and enhance well-being at work, we have introduced prevention and education initiatives dealing with workplace risks, stress, drug and alcohol use, diet and general wellness.

With an eye to continuous improvement, we strive to make the workplace friendlier by taking a more ergonomic approach to designing facilities and remodeling existing environments. We have also devised and deployed tools to measure and analyze occupational health risks.



Several Arkema subsidiaries in France signed an agreement on workplace stress prevention. It reaffirms our goal of offering all employees a work environment conducive to well-being.

The agreement deals with collective prevention initiatives such as training, communication and personal coaching and support. It also calls for implementing a process to identify and analyze high-risk areas, to pinpoint specific stress factors and take appropriate corrective action.

Arkema also offers personal health education. An initiative to prevent drug and alcohol abuse has been in place at all Arkema facilities for four years. It is one of our 14 Safety Essentials and is the focus of a Safety High Point in 2013. Arkema Inc. has officially established the concept of "health culture" in the United States through an initiative which features projects and programs encouraging employees and their families to make healthy lifestyle choices.

“WE SUPPORT A RECRUITMENT POLICY BASED ON THE SINGLE CRITERION OF THE RIGHT BACKGROUND FOR THE JOB”

DOMINIQUE MASSONI,

Vice President, Human Resources Development



FIGURES



Women make up just under a quarter of our workforce, including 18% of non-managers and 30% of managers.



In 2012, they accounted for 23% of all hires, 20% of non-manager hires and 30% of manager hires.



Today women hold 18% of level 15 and above management positions, as classified by the Hay system (a scale of 10 to 19).



**KNOW MORE ABOUT THE GROUP'S CSR STRATEGY AT
WWW.ARKEMA.COM/EN/SOCIAL-RESPONSIBILITY**

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In a sustainable development approach, Arkema decided to have this document printed on paper manufactured in a PEFC certified plant, made with wood fibres from forests planted and exploited according to the same rationale. This paper is manufactured in a plant also ISO 14001 certified (environmental performance norm)

and inked on  **PEFC** 1324/2012 and  **IMPRIM'VERT**® certified equipment.



 **COATEX** INSIDE

ADD DROPS OF VITAMINS TO
YOUR PAINTS AND COATINGS

The image features a large, abstract, glowing blue molecular or cellular structure against a black background. The structure consists of interconnected spheres and thin, filamentous tubes, resembling a complex network or a biological cell. The lighting is dramatic, with bright highlights on the spheres and a soft glow around the tubes. In the bottom right corner, there is a triangular inset showing a perspective view of a grid of lines, possibly representing a circuit board or a data network, with a bright light source at the top right corner of the inset.

External Communications

420, rue d'Estienne d'Orves
92705 Colombes Cedex - France

arkema.com

Arkema, a French société anonyme
with share capital of €625,388,180 -
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