

# SUSTAINABLE DEVELOPMENT REPORT 2008

Beyond Compliance

**innospec**   
specialty chemicals

# BEYOND COMPLIANCE

We are proud of our achievements and the transformation of our company. Striving for performance excellence in safety, product stewardship, environment and resource management has been at the core of our sustainable development program.

**All businesses must comply with the law. Many businesses, such as those in the chemical industry, also operate within a regulatory framework requiring them to comply with rules and regulations specific to their business sector.**

Innospec believes that full legal compliance is a minimum acceptable requirement and that exceeding this legal minimum goes hand-in-hand with good business practice.

In this year's Sustainable Development Report, we aim to illustrate how Innospec not only complies with the laws and regulations governing its operations, but aims to deliver a performance which is beyond compliance.

In previous reports, we have focused on Innospec's new products and illustrated how they combine higher performance with environmental benefits. We also take good care of our historic obligations. In this report, as an example, we highlight the length to which we go to ensure the phase-out of an old product, tetra ethyl lead (TEL), does not leave any adverse environmental impact.

In the following pages, you will read about Innospec Environmental - a worldwide business specializing in the decommissioning, dismantling and disposal of redundant TEL plant and maximizing opportunities for recycling and recovery in the process. The work of Innospec Environmental demonstrates our lifelong commitment to product stewardship.

This commitment extends to the way Innospec approaches the clean-up of its former TEL manufacturing sites and we outline the innovative methods used to remediate two sites in Germany and prepare them for future commercial use.

You will also read about Innospec's drive towards energy efficiency and the major business benefits that have resulted. We also feature the successful efforts made by Innospec's Ellesmere Port site to reduce its carbon footprint.

As usual, this report contains aggregated environmental data for Innospec companies showing the level of resources we use to run the business and the overall impact of our operations on the environment.

In addition, we also provide the key environmental data for our individual operating sites together with a summary of our safety performance which is setting new industry standards.

All our manufacturing sites full comply with national laws and environmental regulations - this is the minimum our stakeholders should expect. We are very proud of the transformation our company has achieved in recent years which is illustrated by this report - and the fact that Innospec has achieved a level of performance which is beyond compliance.



A stylized handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

**Patrick Williams**  
President and  
Chief Executive Officer



A stylized handwritten signature in black ink, featuring a prominent loop and a long horizontal stroke.

**Richard Shone**  
Vice President  
Safety, Health & Environment

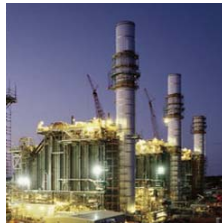
# AN AWARD WINNING COMPANY

Innospec received two awards in 2008 from the UK's Chemical Industries Association. We were recognized for our business success and for enhancing our reputation and that of the industry at large.



## Innospec Inc.

Innospec is a global company with almost 1,000 employees and operations in 23 countries. Its major manufacturing sites are in the United Kingdom, France, Germany and the United States.



## Award winning performance

In 2008, Innospec won two prestigious awards which recognized its achievements in respect of its overall performance and its reputation.

### Company of the Year

Innospec won the Chemical Industries Association's Company of the Year Award. The Award recognized the company's transformation over recent years from a single product company. In the words of the Award's citation, 'Innospec has diversified its product range by investing heavily in research and development, innovation and in improving the environment. In the fuel specialty area where chemicals protect the engine and give higher performance, almost half of the products sold, were invented in the last five years.'

### Reputation

Since its demerger in 1998, Innospec has worked on its performance and won the hard-earned respect of its stakeholders - local communities, regulators, shareholders and employees. Innospec was delighted to have its success recognized by the presentation of the prestigious Chemical Industry Association's Reputation Award in 2008 while recognizing its good reputation will never be a subject for complacency.

## Product stewardship

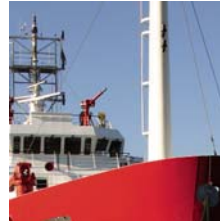
While developing into a specialty chemical company with an advance product portfolio, Innospec has also recognized the importance of managing its historic obligations in respect of its traditional TEL product in order to ensure its phase-out leaves no adverse environmental impact.

The cornerstone of this process is a dedicated global service - Innospec Environmental.

Innospec Environmental provides the specialist expertise necessary for the responsible and efficient management, recovery and recycling of TEL residues not only from customer sites but also from any site that has used TEL. In addition the company decommissions, dismantles, decontaminates and recycles all steelwork from redundant TEL blending and storage tanks, provides ground remediation, and offers training and consultancy.

Operating at sites on all five continents, Innospec Environmental employs specialist equipment and skilled personnel to complete each stage of a decommissioning project: from the initial risk assessment and biochemical monitoring to dismantling the redundant plant and collecting the TEL residues.

The recovered toxic residues are received at our UK Ellesmere Port site for processing and recycling. In 2008, Innospec invested around \$1.07 million (£700,000; €783,000) in developing more efficient recovery processes. Innospec is the only company in the world that recovers this material and minimizes the amount needing further treatment.



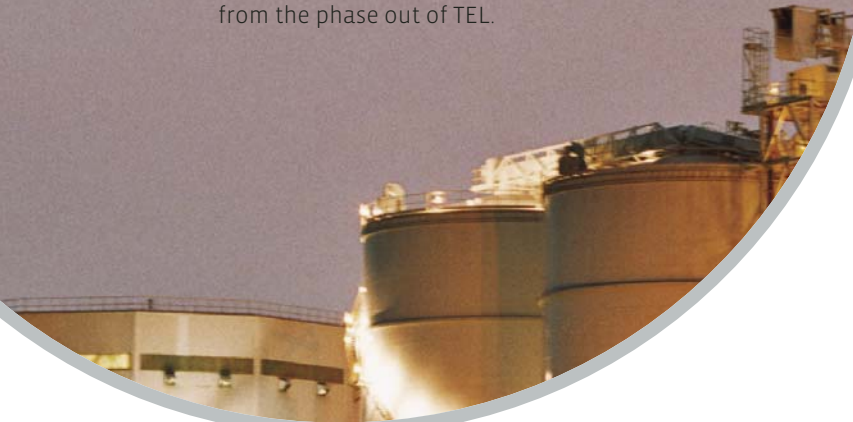
The decommissioned equipment is decontaminated on location which allows all the metal to be recycled in the country where the project takes place. Innospec Environmental activities fully comply with the United Nations' guidelines for best practice in the remediation of redundant TEL facilities. Innospec believes it is the only company in full compliance with these guidelines which also lay down strict conditions for worker safety and continuous health monitoring during the decommissioning process.

The services and expertise of Innospec Environmental are in constant demand. Over the last fourteen years it has completed 77 decommissioning projects at a rate of around five per year. This level of activity is likely to continue for so long as redundant TEL plants are available to be decommissioned.



# PRODUCT STEWARDSHIP TO BE PROUD OF

Our specialist expertise is helping to manage the efficient recovery and recycling of tetra ethyl lead (TEL) so there is no adverse environmental impact from the phase out of TEL.



A circular graphic with a light blue border. The background is a photograph of a rusted, brown metal wall. In the lower-left corner, a metal staircase with a railing is visible. The text 'INNOVATIVE SITE REMEDIATION' is centered in white, uppercase letters.

# INNOVATIVE SITE REMEDIATION

Our commitment to remediating our former manufacturing sites is built on best practice and innovative technology. Two redundant sites in Germany have been remediated in accordance with some of the most exacting regulations in the world.



## Site remediations

Innospec has also undertaken major remediation projects to clean-up its former manufacturing sites.

The company's facility at Biebesheim, Germany, ceased production in 1998 and the site clean-up program was completed in 2003. Its Novoktan plant, also in Germany, was closed in 2003 and the clean-up project completed in 2007. Both sites were subject to ongoing monitoring in 2008.

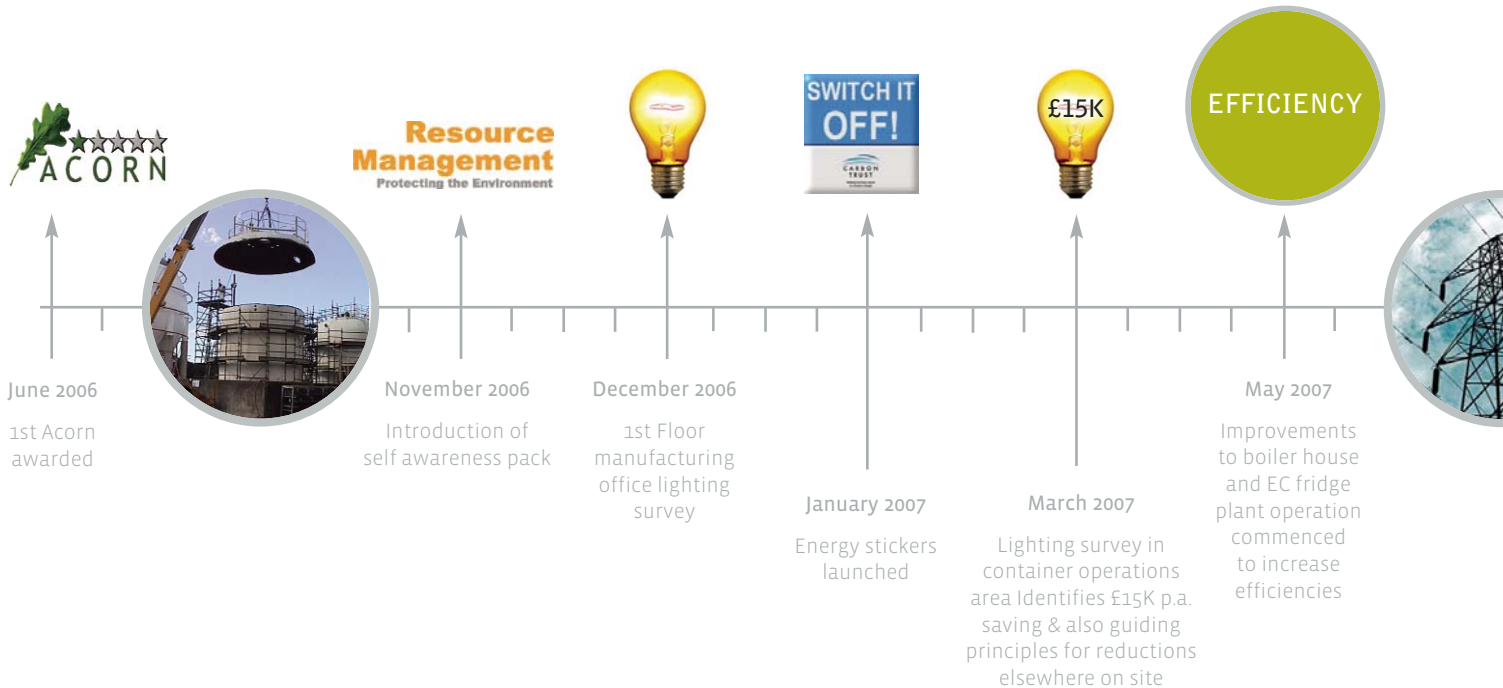
In both cases, Innospec employed innovative methods developed with a specialized environmental consultancy, HPC Harress Pickel Consult AG, to complete the remediation program.

With the approval of the German environmental authorities, a mass-balance sampling system was developed to identify areas of organic lead contamination in the soil and groundwater accumulated over many years of site operations. Using satellite technology, these contaminated 'hot spots' were mapped and a specialist drilling technique used to remove them one-by-one without causing disturbance to the underlying groundwater.

Around 5,000 cubic metres of contaminated soil was removed from each site. It was decontaminated in specialized heat treatment facilities to convert the organic lead to lead oxide which was then recycled to the pigments industry.



As the result of these processes, the Biebesheim site has been sold for commercial use with full approval of the authorities. In relation to the Novoktan site, the groundwater is currently being monitored with every expectation that this site will also be approved by the authorities for future commercial use.



## Effective management of resources

As a global business, Innospec believes that environmental benefits also deliver business benefits. The effective management of resources has therefore been the focus of a global initiative involving the company’s manufacturing sites.

This initiative has resulted in worldwide savings in energy costs of \$2.54 million (£1.67 million; €1.87 million), based on a 2006 baseline. This reduction in energy usage was achieved by changes in the company’s product mix, raw material sourcing and energy efficiency measures.

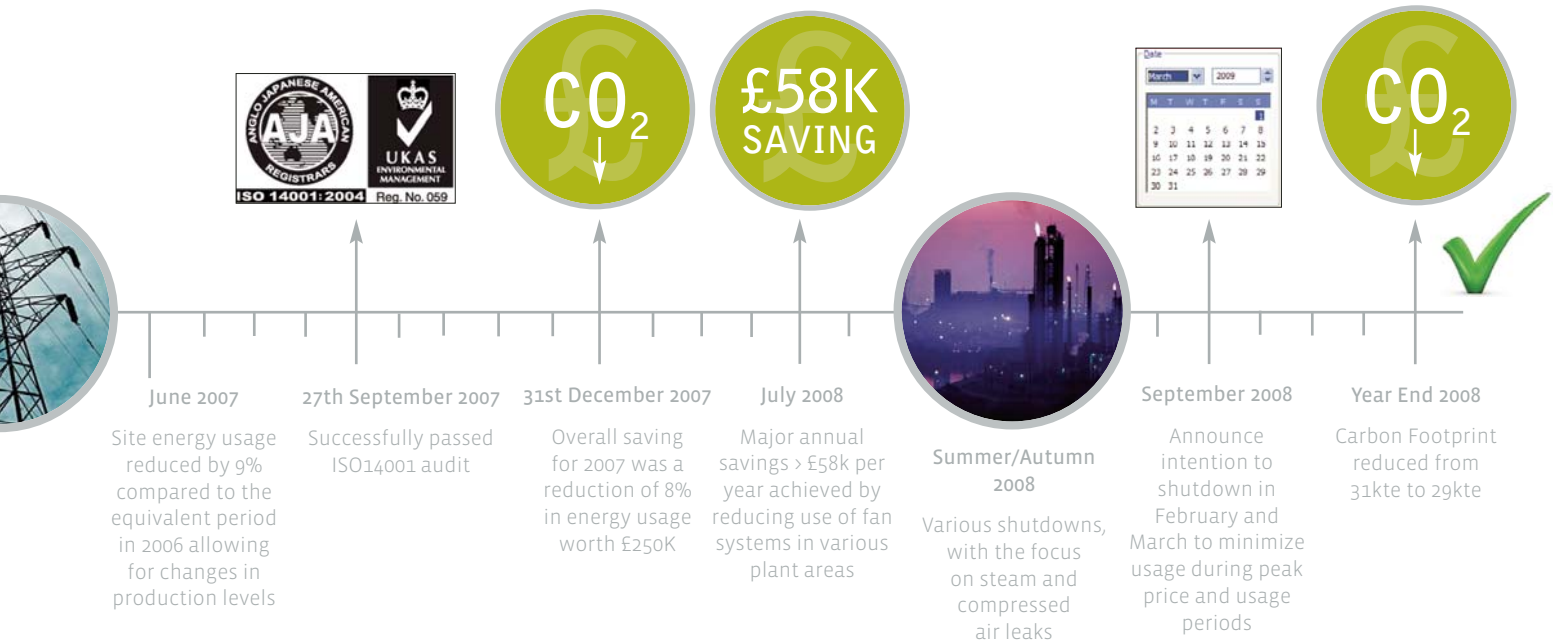
The Ellesmere Port site in the UK provides an example of this initiative in action.

### Energy saving at Ellesmere Port

During the last two years, Ellesmere Port site has been, as illustrated above, the focus of a concerted attempt to reduce energy usage. This process has delivered significant results and has now become part of a continuous journey by the site to improve its efficient use of resources.

Some contributions to increase resource efficiency have stemmed directly from capital expenditure projects, such as the improvements to the site’s boiler house; but it is the cumulative impact of many smaller measures that has given the process its longer-term momentum.

Increased awareness of resource use has been the key to many improvements. Focusing on building heating, for example,



showed that its overall cost amounted to \$115,709 (£76,000; €84,997) and that every hour that the system was switched off provided a saving of \$4,568 (£3,000; €3,356) per year. A similar awareness campaign focused on offices and workshops.

By challenging accepted practice, important savings have been made. Examples of these incremental gains concern the various types of industrial fans used at Ellesmere Port. One fan was found no longer to be necessary to the process for which it was used and this generated a saving of \$48,723 (£32,000; €35,806). Of the fans used in the site's blending and drumming area some were found not to be necessary during the summer months and others found to be no longer required at all, providing a saving of \$39,593 (£26,000; €29,100) per year.

The process continues under the guidance of a Site Management Group which has created an ideas database to which employees are invited to contribute. This database allows each suggestion, related to energy or other resource use, to be filtered, evaluated and implemented. One such suggestion, to use recycled instead of fresh water in a vent treatment process contributed to a 16% reduction in the sites water consumption.

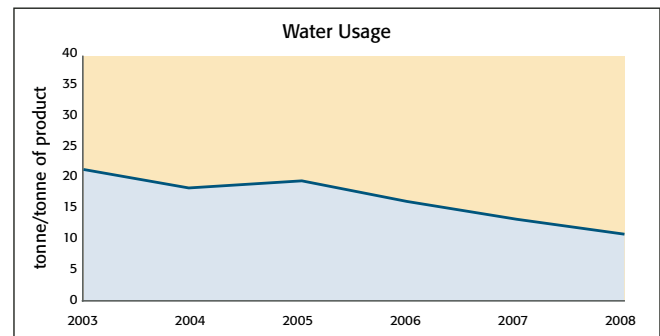
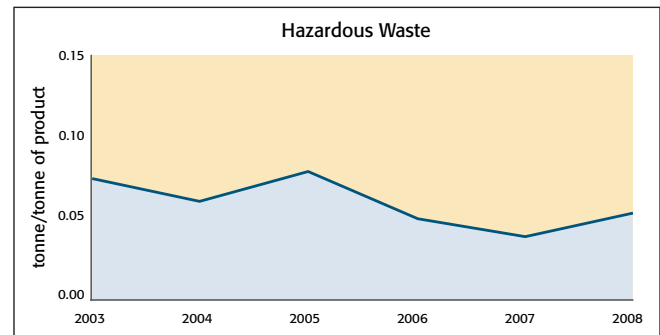
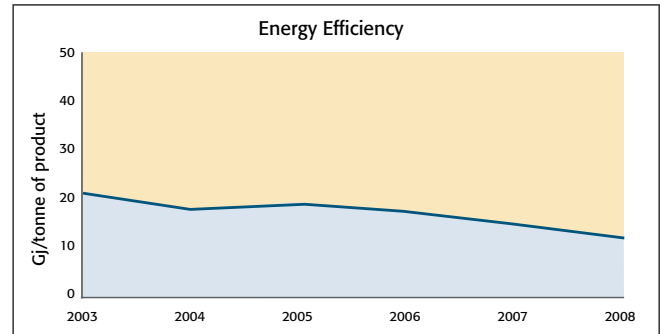
The effectiveness of the energy saving process was demonstrated in 2008 when Ellesmere Port's energy usage fell by 5% despite the site's total production volumes increasing by 20%. As a consequence, the site's carbon footprint reduced from 31 to 29 kilotonnes.

## Resources

Innospec continually monitors its use of valuable resources and has ten-year objectives for energy efficiency, water usage and levels of hazardous waste. These charts measure the company's progress for the period, 2003-2008, for every tonne of product it produces.

### Summary

In 2008, overall energy efficiency for Innospec companies improved by 13% which represents a 39% improvement over the last six years. Levels of hazardous waste rose by 41% in 2008 but have fallen by 26% since 2003. Water usage fell by a further 19% and has now almost halved since 2003.

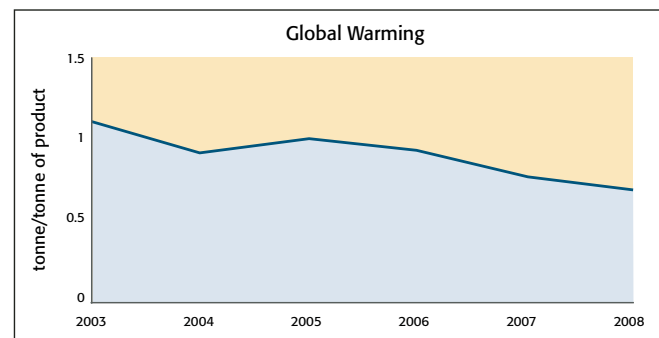
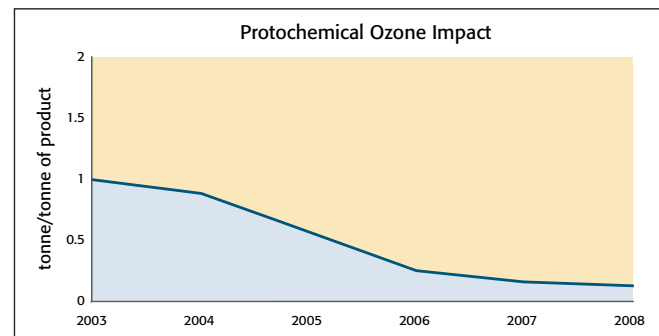
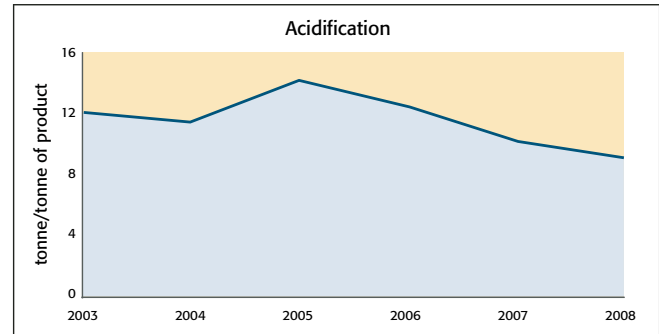


## Environmental burden

Innospec also measures the overall environmental burden imposed on the environment by its operations.

### Summary

All three measures of environmental impact fell during 2008: acidification by 11%, photochemical ozone impact by 13%, and global warming by 13%. Levels of photochemical ozone impact have now fallen by 87% since 2003.





# NEW STANDARDS IN SAFETY PERFORMANCE

Our sites continue to win awards for their safety performance record. In 2008 we reached five million man-hours without a Lost Time Accident.



## Safety performance

**Process safety and occupational safety are central to Innospec's operations.**

The company has been committed to an effective system of process safety for more than ten years. It has a companywide approach that is being utilized at all its sites. They are required to comply with the company's Process Safety Standards, carry out self assessments, and are subjected to peer-group assessments, in addition to corporate audits in relation to their safety, health and environmental (SHE) performance.

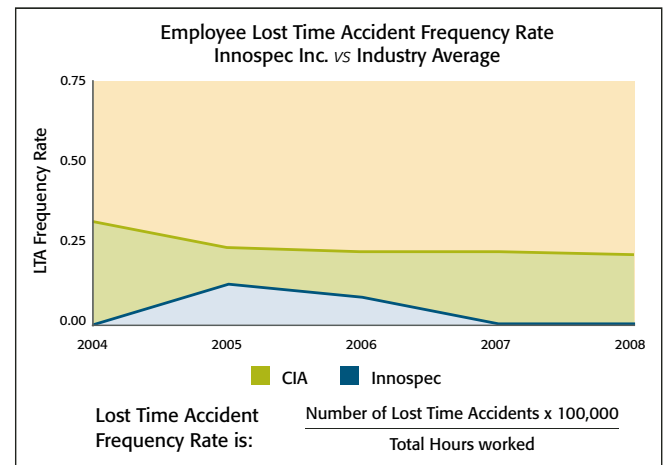
The company runs a Best Practice Group, consisting of representatives from all sites, which meets regularly to share experience. The management team's Annual Review takes account of the results of all audits; any accidents, incidents, or near-misses as well as the company's Process Safety Performance Indicators. This process establishes the SHE program for the following year.

One of the contributory factors leading to Innospec winning the Chemical Industries Association's Reputation Award in 2008 was the company's excellent safety record. In 2008, Innospec's Ellesmere Port site won a Gold Medal from The Royal Society for the Prevention of Accidents (RoSPA) for the second time. This medal is only given to companies who have received a RoSPA Gold Award for five consecutive years.

Widnes site also won a ROSPA Gold Award for the first time.

The strength of the company's safety program is such that in 2008, Innospec globally achieved five million employee man-hours without a Lost Time Accident (LTA).

The company's own Safety Awards were won by the Widnes Site which won a Gold Award for achieving one million employee man-hours without an LTA and the Leuna site which won a Bronze Award for achieving 250,000 employee man-hours without an LTA.

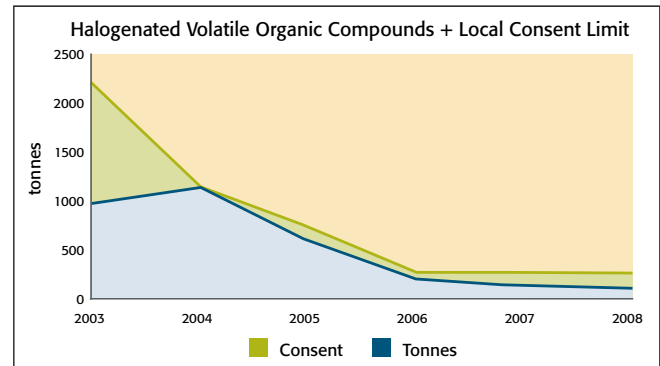
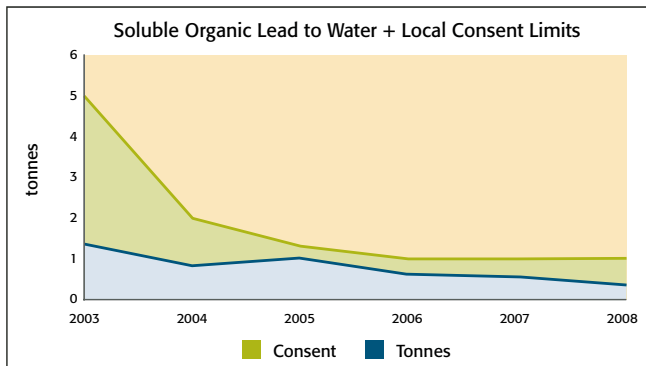
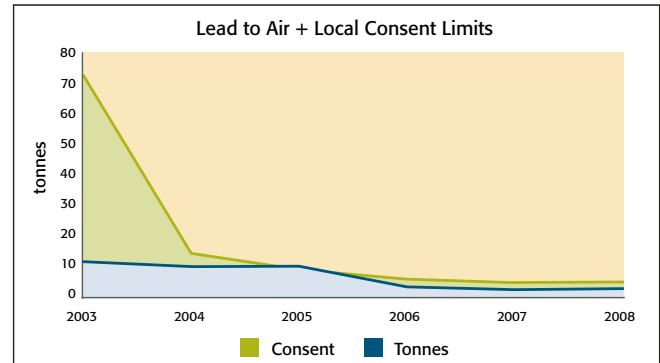
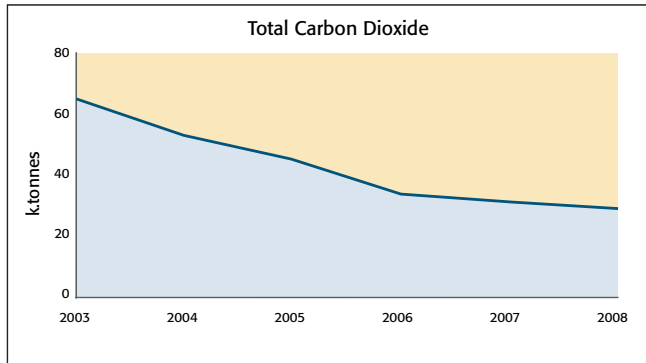


# LONG-TERM FALL IN EMISSIONS AND WASTE

Our sites around the world are committed to long term targets to reduce the quantity of emissions and hazardous waste generated by our production processes.



## Ellesmere Port, United Kingdom



### Summary

As this data shows, the Ellesmere Port site was in full compliance with official Consent Limits in 2008. Total levels of carbon dioxide emissions continued their downward trend in 2008 - falling by a further 7% taking their cumulative decline to 55% since 2003. Levels of lead to air emissions reversed their trend of recent

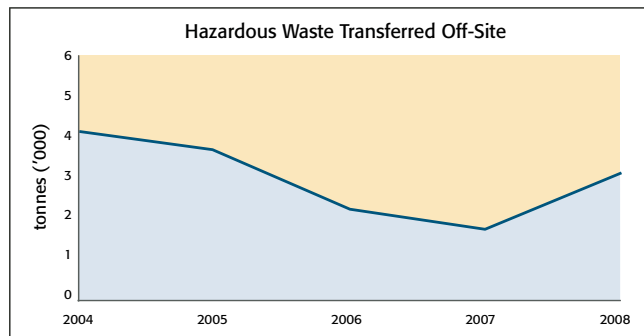
years and showed a 27% year-on-year increase - though this type of emission has fallen by 72% since 2003. Soluble Organic lead to water fell by a further 33%, bringing the total reduction since 2003 to 73%. Halogenated Volatile Organic Compounds fell by a further 14% and have fallen by 87% since 2003.

## Widnes, United Kingdom

Innospec's Widnes site manufactures chemicals for perfumes, cosmetics and personal care products as well as producing intermediate fine chemicals used as key components in other substances.

**Summary**

The Widnes site shows a year-on-year rise in its hazardous waste transported off-site of 71% though, over the last five years, the overall annual total of hazardous waste has fallen by 25%.

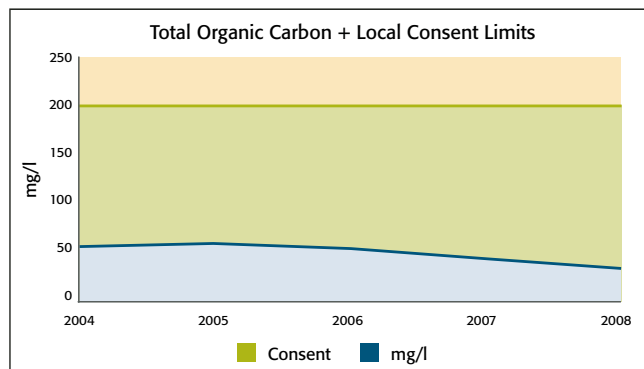


## Vernon, France

The heavy fuel oil additives produced at the Vernon site are used in boilers, furnaces and gas turbines.

**Summary**

The Vernon site's levels of Total Organic Carbon fell by 22% in 2008. This reduction was achieved by the site making changes to one of its processes which resulted in less organic carbon being released. In addition the site increased the effectiveness of its waste water treatment facility by modifying the manner in which it used its carbon beds. This resulted in lower levels of contaminants in the site's waste water.

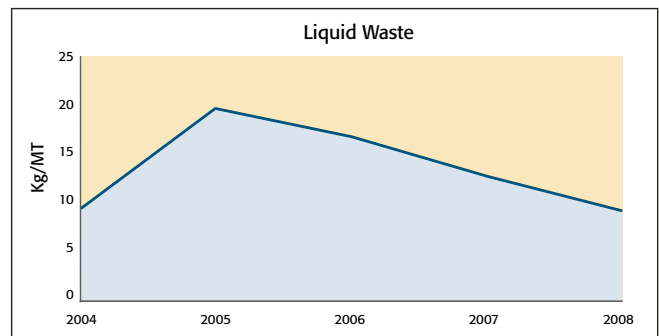
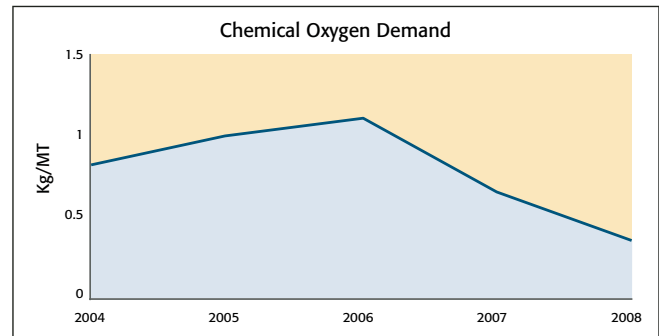


## Herne, Germany

The Herne site manufactures specialty chemicals based on Ferrocene - a compound used in additives to aid the combustion and reduce emissions in a wide range of fuels.

### Summary

The Herne sites levels of Chemical Oxygen Demand fell by 42% and its Liquid Waste total fell by 27% in 2008.

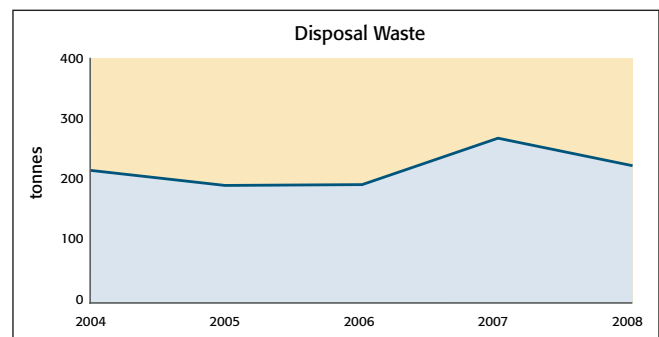


## Leuna, Germany

The site manufactures additive-free flexible thermo-plastic material used in injection molding and in films, coatings, sealants and cables. Leuna also produces specialized waxes for use in plastic processing, printing inks and coatings, textiles and polishes.

### Summary

Leuna's level of Disposal Waste fell by 16% in 2008.

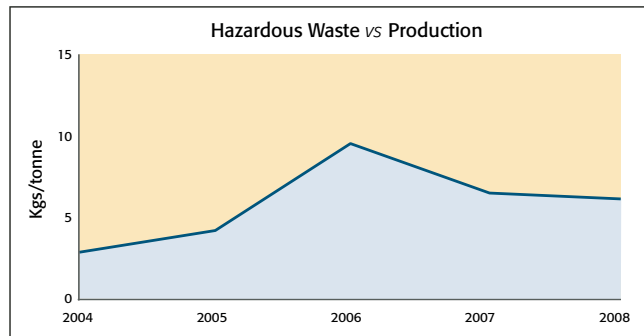


## High Point, United States

The production facilities at High Point are used by other chemical manufacturers to help to develop new products, provide supplementary manufacturing capacity, or to achieve lower unit costs.

### Summary

Levels of hazardous waste at the High Point site are directly related to the volume and type of production it undertakes on behalf of other chemical companies. The site's hazardous waste relative to its production volumes reduced by 6% in 2008.

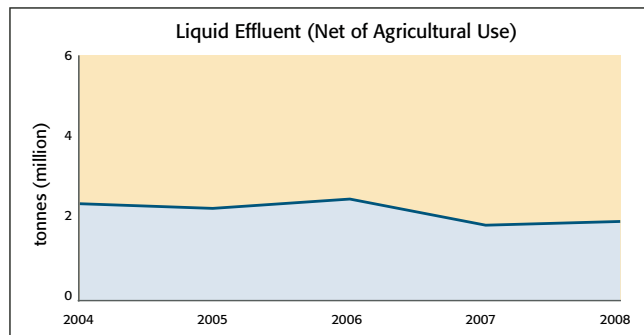


## Spencer, United States

The Spencer site produces state-of-the-art emollients for the cosmetic and personal care industries. Its products are used in sunscreens, fragrances as well as hair and skin conditioners.

### Summary

Spencer's liquid waste is recycled and used as a fertilizer by local farmers. In 2008, the proportion of waste being used for agricultural purposes fell by just over 1% and the site's net waste rose by 4%.







# SAVING ENERGY THROUGH CAREFUL MANAGEMENT

We have made worldwide savings in our energy costs totalling \$2.54 million. This shows that helping the environment is also good for our business.

## Validation Statement

Enviros has conducted an independent validation of the 2008 Innospec Inc. Sustainable Development (SD) Report to provide assurance on the completeness, transparency and accuracy of the report, and to review systems for data collection. The validation process involved interviews with staff responsible for data collection and reporting at both the central level and from a selection of representative sites, within the UK.

### Conclusion

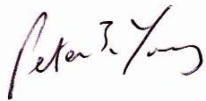
It is acknowledged that this is the first year that Innospec have undertaken formal independent assurance of their SD report and that the initial focus has been in assuring the quality of the data presented. Taking this into account, Innospec should be commended for their commitment to SD and reporting.

The theme for this report is “beyond compliance” and Innospec have demonstrated their achievement of this goal. For example through internal adoption and audited compliance with Process Safety Standards, learning from the SHE best practice group, focusing on resource use, as well as working within all regulatory emission limits.

There is a structured framework for collating and reporting health and safety data. This provides accurate and complete data with transparency throughout the reporting process. Reporting of environmental data was also found to be robust. However, whilst data reported is materially accurate, data collection and the internal assurance process could be improved to provide a readily verifiable data audit trail.

This SD report contains relevant reported data and specific examples, and care has been taken over the last few years to build up trending data by reporting comparable data and this is applauded. Innospec have strong core values, SHE objectives and targets. and a sustainability strategy which would benefit from more exposure in future reports. In their journey of continuous improvement Innospec have achieved significant progress towards the not insignificant goal of a full SD report. Innospec have been encouraged to review issues material to their stakeholders to help further develop the content of future reports towards this goal.

Within the scope of the validation process we consider that the text and data in the report represent an accurate account of Innospec’s SD performance during the reported period.

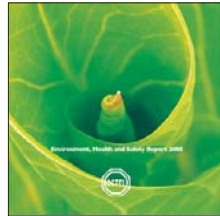


Peter J Young  
Strategy Director





1999



2000



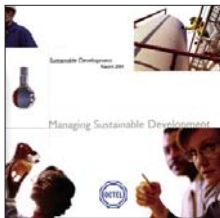
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2002



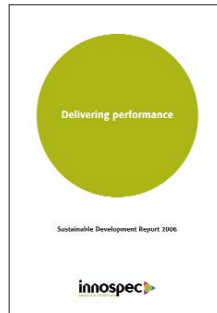
2003



2004



2005



2006



2007



2008

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Currency converted from £ sterling to US dollar and EURO on the date of the report validation.



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