



# Surviving REACH

A Guide for Companies that Use Chemicals

# Surviving REACH

## A Guide for Companies that Use Chemicals

Rachel Massey  
Global Development and Environment Institute, Tufts University

■	What's the big deal about chemicals?	4
■	Why should I care about REACH?	5
■	REACH in a nutshell	6
■	REACH vocabulary	7
■	What will I have to do under REACH?	8
■	Concerns about REACH	10
	1. Will chemical prices go up?	10
	2. Will I lose access to the chemicals I need?	11
	3. Will REACH delay products coming to market?	12
■	Making the most of REACH: What's in it for business?	14
	1. Access to information	14
	2. Less exposure to liability claims	16
	3. Lower worker protection and compensation costs	17
	4. Increased trust, secure reputation	18
	5. Competitive advantages	19
■	What do other companies say about REACH?	20
■	Conclusion	21
■	References	22

The International Chemical Secretariat (Chemsec) is a non-profit organisation dedicated to work towards a toxic free environment. The Secretariat is a cooperation between four environmental organizations in Sweden: SSNC, WWF, FoE and Fältbiologerna.

Göteborg, March 2005



The European Union is preparing for a major shift in chemicals regulation. The new system is called REACH: Registration, Evaluation, and Authorization of Chemicals. REACH is designed to ensure that chemicals are safe for human health and the environment. At the same time, REACH is intended to enhance economic efficiency. The goal is a win-win situation that offers benefits for health, the environment, and business.

This report is written for companies that buy or use chemicals. That includes most manufacturers and formulators, as well as construction companies, retailers, and others.

The debate about REACH has been heated. Some people say the regulation is too ambitious, while others say it does not go far enough. The concerns of chemical users are frequently cited in the course of the debate. But for the most part, chemical users themselves have not taken an active role. Instead, others have spoken for them. As a result, the interests of chemical users have sometimes been misrepresented.

The debate about REACH is now in its final stages. Will the final policy help or hurt your company? Now is the time to get informed and get involved. This guide will give you the information you need to start making your voice heard in the debate – and show you why your input is needed. In this report, you will find out about the specific ways you can gain from REACH, the concerns that some companies have expressed about the regulation, and the ways you can get involved in this important policy discussion.

# ■ What's the big deal about chemicals?

**It may seem hard to believe, but the majority of chemicals on the European market today are not safety tested. This is not because we don't know how to test them. It's because chemical manufacturers are not required to test them, and that's because of a major loophole that was written into chemical safety laws a quarter century ago.**

In 1979, the EU adopted legislation that requires stringent safety testing of all chemicals that are being brought to the market for the first time. However, the legislation created an exemption for all chemicals that were on the market by September 1981. All chemicals that were registered at that time have been exempt from safety testing ever since. These are known as "existing" chemicals, and there are presumably 70,000 of them on the market today. More than 90% by volume of all chemicals on the market are so-called "existing" chemicals.

Under REACH, there will be no distinction between "new" and "existing" chemicals. Chemical manufacturers and importeurs will have to provide safety data on all chemicals sold in signi-

ficant quantities. The backlog of "existing" chemicals will finally be tested, and the companies that use them will receive the information they need to make sound decisions.

In addition to closing this loophole, REACH will simplify chemicals regulation. Currently, there are about 40 different pieces of legislation for chemicals. Under REACH, these disparate pieces of legislation will be unified in a logical, efficient system. Finally, and perhaps most importantly, REACH will require chemical manufacturers to share crucial safety information with their customers, the chemical users.

As we will discuss, REACH is a strong piece of legislation, but it is not perfect. For example, REACH requires relatively little testing of chemicals that are produced at levels below 10 tonnes per year. As currently written, REACH provides less information on chemicals at this volume level than we currently require for new chemicals. REACH could require several more safety tests for chemicals at this level without causing a significant increase in total implementation cost. On this and other points, you have the opportunity to speak out now for a stronger form of the legislation.



## Impacts of REACH will be limited according to industry report<sup>1</sup>

In its October 2003 Extended Impact Assessment, the European Commission estimated that REACH would cost companies a total of about 2.3 billion Euros over 11 years.<sup>2</sup> Macroeconomic effects on GDP are expected to be "very limited," and REACH is expected to yield business benefits including improvements in innovation, competitiveness, and worker safety, as well as significant health cost savings.

Recently, the Commission partnered with the industry groups CEFIC and UNICE to commission an additional impact assessment, carried out by the consulting group KPMG. Two environmental organizations, the European Environmental Bureau and WWF, initially participated as advisors. In July 2004 these groups withdrew their support for the KPMG study, citing concerns about a methodological bias towards negative business impact cases.

Despite this bias, the study results clearly indicate that the business impacts of REACH will be minor. Important findings of the KPMG study include the following:

- Registration requirements for low-volume chemicals will not lead to withdrawal from the market.
- REACH will have limited impacts on the profitability of downstream users.
- In general, companies do not expect to lose market share due to REACH.
- Companies are unlikely to leave the EU to avoid complying with REACH.

# Why should I care about REACH? ■

REACH is directed primarily at manufacturers and importers of chemicals. So why should you, as a user of chemicals, care about this legislation? There are two key reasons why you should learn about REACH now, while the legislative process is still under way:

■ Chemical users stand to gain from REACH. REACH offers you the opportunity to have greater protection from liability, lower costs for worker protection and compensation, and a competitive edge internationally, among other benefits. REACH gives you access to the information that you need in order to make good decisions about chemicals.

■ Important decisions are being made now. Chemical users will benefit from strengthening REACH. As the legislation is currently written, it contains loopholes that could limit its effectiveness. Now is the time to speak out against those loopholes and make sure that your interests are represented in the final version of the legislation.

**This guide gives you the information you need to get involved in this crucial stage of the debate.**



# REACH in a nutshell

## [Registration – Evaluation – Authorisation – Chemicals]

REACH will govern information collection, analysis, and regulation of industrial chemicals. REACH has three main components: Registration, Evaluation, and Authorization.

– **IN THE REGISTRATION PHASE**, manufacturers and importers of chemicals must compile information on each chemical produced at or above 1 tonne per year. Registration of existing chemicals will occur over the course of eleven years, with the highest volume chemicals being registered earliest. New chemicals will be registered as they are introduced. After eleven years, all existing chemicals will have been dealt with and the system will continue to operate for new chemicals only. Registration will occur at a centralized new Agency.

– **IN THE EVALUATION PHASE**, Member States will evaluate the information provided in the registration phase for selected chemicals, and request additional information if they identify data gaps.

– **SUBSTANCES OF PARTICULARLY HIGH CONCERN WILL BE SUBJECT TO AUTHORIZATION**, meaning that they can be used only with special permission. This includes chemicals that cause cancer, genetic mutations, or birth defects (CMRs), as well as substances that are persistent and bioaccumulative, among others<sup>3</sup>.

As a safety net in case a substance is not adequately controlled through these measures, REACH also allows for restriction of substances that pose unacceptable risks to health or the environment. Restrictions can take the form of risk management measures, or partial or complete bans.

Testing and registration requirements under REACH are tiered by volume: high volume producers must carry out more tests than low volume producers, and must register their chemicals earlier. The lowest volume producers have eleven years to complete their registrations after REACH goes into effect. Low volume producers will also have access to the data submitted by higher volume producers, making their testing and registration process easier.

### QUICK FACT

#### Time to Registration

Low volume producers have 11 years to complete their registrations after REACH goes into effect. That means “existing” chemicals in this category, which have been on the market since 1981, will have been sold for 36 years before undergoing safety tests!

### QUICK FACT

#### What does REACH Regulate?

##### REACH regulates:

- the manufacture, import, marketing and use of chemicals

##### Exemptions under REACH:<sup>4</sup>

Several categories of substances are not regulated by REACH. These include:

- Pharmaceuticals, pesticides, and radioactive materials (these are regulated under other laws);
- Substances that enter Europe only in transit to another location;
- Non-isolated intermediates (substances that are produced only in the course of creating another substance and never leave the factory);
- Substances that are formed as byproducts, or that result from an incidental chemical reaction, such as exposure of certain chemicals to sunlight; and
- A variety of natural substances e.g. oils, fatty acids, natural gas, crude oil and coal. Minerals, ores, or substances occurring in nature are exempted if they are not chemically modified during their manufacturing and not dangerous.

# REACH Vocabulary <sup>5</sup>

To follow the REACH debate, you need to know what a few words mean in the regulatory world. Here is a quick glossary of some common terms used in this report.

**SUBSTANCE:** a single chemical (an element and its compounds, either natural or manufactured). For example, carbon is a substance because it is an element; calcium carbonate is a substance because it is a single compound.

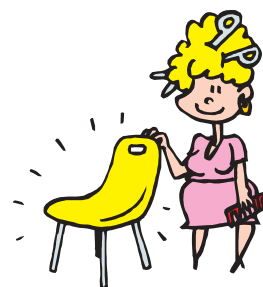


**PREPARATION:** a mixture or solution containing two or more substances. Paint, for example, is a preparation.



*Anything we call a “chemical” in ordinary conversation is referred to as either a “substance” or a “preparation” in the legal language of REACH.*

**ARTICLE:** legal vocabulary for any object that we would generally call a “product.” Anything that has been given a specific shape, surface, or design during production, so that it can be used for a specific purpose. Computers, books, toys, and cars are all articles. We use the term “article” to distinguish these items from chemical substances and preparations



*Any object produced by industry that is not a substance or a preparation is an “article.”*

**DOWNSTREAM USER:** a company that buys chemicals and uses them in production. For example, most manufacturers and formulators are downstream users. Companies that use substances or preparations in the course of their business, such as hairdressers, also qualify as downstream users.

In this report, we distinguish between downstream users of chemicals and **ARTICLE USERS** (or users of articles). Article users are the companies that use or sell articles. For example, clothing, furniture, and other articles may contain chemicals, so the companies that use or sell them are article users.

*Companies that use chemicals may be either “downstream users” or “article users.” The distinction is important because downstream users have more privileges under REACH than article users.*

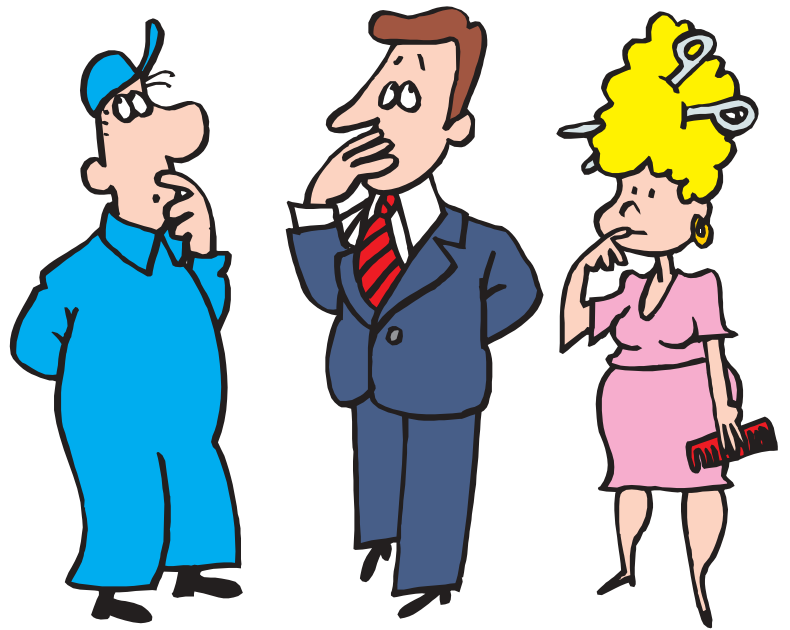
## ■ What will I have to do under REACH?<sup>6</sup>

REACH primarily regulates chemical manufacturers and importers, but chemical users have some responsibilities as well. Under REACH, users must provide certain information both up and down the supply chain. This does not mean you have to reveal important trade secrets, though. REACH includes safeguards to protect confidentiality.

When they register a chemical substance, manufacturers and importers must include all the uses they are aware of for that substance. For example, if chemical X is being used to clean cars, to make furniture, and to make baby toys, the manufacturer or importer of that chemical must ensure that they cover uses of this sort in the registration and define safe management practices for each use scenario.

As a downstream user, if you find that your use of a chemical is not covered in the documentation received from your supplier, you have two options.

1. You can inform your supplier of that use, so the supplier can do a risk assessment and define safe management practices. This information will be put in a document known as a chemical



safety report (CSR), which is provided to the Member State competent authorities. (See box, “Tools for Chemical Safety.”)

2. If you do not want your application of the substance to be known to the supplier, you can instead develop your own chemical safety report. It is also worth noting that REACH does not specify that you have to inform manufacturers exactly how you use a chemical. The exact requirements have not been specified yet, but you will not have to share information that would reveal proprietary production methods.

### *Myths and Facts about REACH:*

#### **Confidentiality**

**Myth:** REACH will force chemical users to disclose confidential information.

**Fact:** In order to have your use of a chemical included in a registration, you need to either tell your supplier how you use the chemical or do a risk assessment yourself – but this does not mean you have to reveal proprietary processes or formulations. You only have to provide enough information for the use to be included in the discussion of appropriate risk management measures.



## Tools for Chemical Safety:

*Chemical Safety Reports (CSR) and Safety Data Sheets (SDS)*

### ■ Chemical Safety Reports

Manufacturers and importers must complete a chemical safety assessment (CSA) for any substance subject to registration if they manufacture or import it at or above 10 tonnes per year. The CSA includes an assessment of human health and environmental hazards. It also looks at whether the substance is persistent, bioaccumulative, and toxic (PBT) or very persistent and very bioaccumulative (vPvB). If the substance is found to be dangerous, or meets the PBT/vPvB criteria, the manufacturer or importer must also conduct an exposure assessment and a risk assessment. The results of the CSA are documented in a chemical safety report (CSR), which is submitted to the agency along with the registration.

### ■ Safety Data Sheets<sup>7</sup>

When a chemical is found to be dangerous, in accordance with 67/548/EEC or 1999/45/EC, the company placing it on the market must provide a safety data sheet (SDS) to downstream users. The information in the SDS must be consistent with the information in the chemical safety report (CSR) for that substance. The SDS must contain basic information on the chemical, including toxicity and ecological effects. It must also indicate if the substance is subject to authorization or restriction.

Chemical users also have a duty to communicate certain information up the supply chain. Specifically, they must inform the next actor or distributor up the supply chain of any new hazards they discover, as well as any information suggesting that the risk management instructions in an SDS are inadequate. They must also give workers access to the information in the SDS on substances they use or are exposed to at work.

### ■ Room for Improvement: Article users need information too!

As the REACH legislation is currently written, only downstream users have access to the SDS for a substance; article users such as retailers of clothing or furniture do

not have a right to receive this information. This is a weakness in the draft legislation, and article users should express their concerns about this issue if they want access to information.

### ■ What Does REACH Say about Chemicals in Products?<sup>8</sup>

If you are a manufacturer or retailer, you probably make, sell, or use products that contain chemicals. In the language of REACH, the products we buy and sell every day are known as “articles.” Bicycles, computers, toys, shoes, mattresses, and cars are all articles.

REACH does not require registration of articles. The logic is that since chemicals must be registered, any chemicals within an article will have been tested and registered further up the supply chain. The company that incorporates the chemical in the article must be using the chemical within the exposure scenarios covered in the registration.

What about articles produced outside Europe? Imported articles could, potentially, contain substances that are not registered under REACH. Therefore, if a substance is not already registered, and is intended or likely to be released from an article, the Agency must under certain conditions be informed about it, and may ask for a registration.

### ■ Room for Improvement: No loopholes for imported articles!

As currently written, REACH measures chemical substances by “article type.” This means that importers can avoid regulation by dividing their merchandise into many small “article types” (e.g. blue chairs, red chairs, green chairs with wheels, etc).<sup>9</sup> This provision potentially opens a loophole for foreign producers, who could include large amounts of unregistered substances in the goods they export to the EU. To close this loophole, the legislation should measure chemical use per importer, not per article type.

## ■ Concerns about REACH

Some companies are worried about what business will be like for them under REACH. In this section, we look at a few common concerns and questions.

### 1. Will chemical prices go up?

Some people argue that complying with REACH will be very expensive. They say the costs of REACH will change the entire industry, raising prices and indirectly hurting chemical users.

In fact, the cost increase for chemical inputs resulting from the new testing and registration requirements will be tiny. The total

annual cost of REACH for the chemicals industry is estimated at about one-twenty-fifth of a percent of the value of annual sales (see: Costs in Perspective).

What will this mean for users of chemicals? Economists at the European Commission's Directorate General for Enterprise developed a model to estimate the change in the cost of chemicals.<sup>10</sup> They found that the cost of chemicals would probably increase by one-fiftieth of one percent – or, at the most, by about one-tenth of one percent.

Clearly, even under the high costs scenario, the total change in chemical costs is very small. Also note that the DG Enterprise model is a short run analysis. That means it does not look at the ways companies adjust to new regulations over time, for example by inventing new cost-cutting measures or developing profitable new substitute products.



*“Direct REACH costs of selected materials [for the study] will have limited impact on the profitability of the downstream users.”*

*Results from the KPMG case study 2005 commissioned by CEFIC and UNICE (see p.4)*

## *“Chemical suppliers and formulators in principle prefer registration above substitution/reformulation.”*

*Results from the KPMG case study 2005 commissioned by CEFIC and UNICE (see p.4)*

### Costs in Perspective

#### ■ Can the chemicals industry afford REACH?

According to estimates by the European Commission, the total cost to the chemical industry of complying with REACH will be about €200 million per year for eleven years. How big a cost is that, in relation to total industry turnover?

The chemical industry's sales totalled €556 billion per year for the EU-25 in 2003.<sup>11</sup> Thus, compliance costs would be equal to about .04%, or one-twenty-fifth of a percent, of annual sales.

To put that in perspective, the chemical industry's annual expenditures on energy are many times larger; they amounted to about 3% of total sales between 1996 and 2000.<sup>12</sup>

Given these facts, it is hard to see why the chemicals industry is so concerned about the costs of complying with REACH. It may be that when the chemical companies say they are worried about compliance costs, they actually have other concerns in mind, such as liability for past harms if a chemical is discovered to be dangerous.

#### ■ Can Chemical Users Afford REACH?

According to economists at DG Enterprise, chemical prices might increase by 0.02% (one-fiftieth of one percent) under REACH. In an unlikely “high costs scenario,” chemical prices might increase by 0.1% (one-tenth of one percent).<sup>13</sup>

Important industrial inputs vary in price all the time. For example, the average price of manufactured inputs for all of European industry regularly varies by an amount comparable to these figures. The price of crude oil varies by several tenths of a percent on a weekly basis. Some of these price changes are temporary, while others are long lasting; successful businesses routinely adjust to these changes.<sup>14</sup>

What does a price change for one input mean for business? Suppose that twelve percent of your total operating cost is devoted to buying chemicals. In that case, an increase of one-tenth of one percent in the cost of chemicals would translate into an increase of just 0.012%, or just over a hundredth of one percent, in your total operating costs.

Can you afford a change of this magnitude? Think about it and decide for yourself!

### 2. Will I lose access to the chemicals I need?

Some companies are afraid that large numbers of chemicals will be withdrawn to avoid the expense of testing and registration. The prospect of withdrawal, or “deselection,” is presented as a threat to the viability of downstream users. If you have heard these arguments, you may be worried that a chemical you need will cease to be available, simply because it was too difficult to test and register. This is very unlikely to happen. In fact, the industry studies that project high withdrawal rates have been widely discredited.

A study by Arthur D. Little (ADL) consulting firm estimated that a substantial percentage of the chemicals on the market today will be withdrawn due to the costs of testing and registration under REACH. The ADL study has been discredited as using inflated and unverifiable figures. However, it has achieved widespread circulation, and the inflated figures it presents have been widely quoted. In contrast, the European Commission expects withdrawal of only 1-2% of all chemical substances, or 0.5% by market value.<sup>15</sup>

So, will any important chemical input be withdrawn? Will downstream users be forced to reformulate their products and lose money in the process?

Again, this is very unlikely. Manufacturers and importers have to consult with downstream users to identify the ways in which they are using a given substance, so that all the relevant uses can be included in the registration. Therefore, it is unrealistic to think a chemical you use will be withdrawn simply because the manufacturer or importer doesn't know you need it.

Some companies are afraid that their suppliers will not include all known uses for a chemical in the chemical safety assessment, as a way to cut costs. In fact, if you inform your supplier of how you are using a chemical, your supplier is required to cover that use in the assessment, 'alternating the producers have the possibility to advise against that use.

Furthermore, the testing and registration requirement will create only a small increase in production cost. Standard economic models predict that the manufacturers and importers will absorb part of this cost and pass on part of it to downstream users. Small price fluctuations will not lead to withdrawal unless demand for the chemical is minimal.

## “Companies do not expect to lose market share or simply don't know”

Results from the KPMG case study 2005 commissioned by CEFIC and UNICE (see p.4)

What about reformulation? It is possible that with the new information available under REACH, some chemical users will decide to reformulate their products to make them safer. Since REACH is phased in gradually, companies can make these decisions largely at their own pace. If, for example, a product is routinely reformulated every five years, there will be two opportunities for reformulation within the eleven-year phase-in period of REACH.<sup>16</sup>

### What about small and medium sized enterprises?

New regulations sometimes affect small and medium enterprises (SMEs) disproportionately. How will SMEs fare under REACH? Some advantages for SMEs include the following:<sup>17</sup>

- Most SMEs are users, not producers. Under REACH, SMEs will be able to rely on suppliers to define and take responsibility for the risk management measures required for each substance.
- Under REACH, SMEs will need only to acquaint themselves with one consistent law, rather than having to understand and comply with multiple overlapping laws as they currently have to do.

However, there may be some cases in which SMEs need special help. For example, SMEs might benefit from assistance reviewing their formulations and manufacturing processes to see whether any changes would be appropriate. Because this is not an area that has been clearly defined for the EU as a whole, it is possible

that Member States will vary significantly in how much help they offer to SMEs. This is a legitimate area for concern, and concerned parties should express their views on this issue.

### 3. Will REACH delay introduction of new chemicals and products?

Some companies have expressed concern that REACH will delay or prevent important new chemicals from coming to market.<sup>18</sup> In fact, REACH will make it easier for new substances to be introduced, and it will allow existing substances to remain on the market while they are being registered. The only case in which a delay would occur would be if a chemical is found to pose serious health or environmental safety concerns. In this case, if the chemical is subject to authorization, a company requesting permission to use the chemical may experience a delay while the authorization request is being considered.

#### Will the registration requirement cause delays?

No. Under current regulations, there is a 60 day waiting period between submission of data on a new chemical and permission to market that chemical. Under REACH, the waiting period will be substantially shorter: just 21 days. And of course, existing chemicals can continue to be sold while registration is in progress, so registration will not produce any delays in that category.

### Myths and Facts about REACH:

#### Use of Existing Data

**Myth:** REACH requires re-testing of chemicals that have already been studied.

**Fact:** In fact, REACH encourages the use of existing data. This can even include data from studies done outside the EU, as long as those studies meet EU standards. Many of the test methods recommended in REACH have already been standardized at the OECD level, so most existing data will meet the standards required by REACH.<sup>19</sup>

## “Delocalisation just because of REACH is unlikely”

Results from the KPMG case study 2005 commissioned by CEFIC and UNICE (see p.4)

### Myths and Facts about REACH:

#### Promoting Innovation <sup>20</sup>

**Myth:** REACH will make it harder for companies to introduce useful new chemicals.

**Fact:** The opposite is true: REACH actually makes it easier for companies to introduce new chemicals. Under the current system, existing chemicals have an artificial advantage, because they are not subject to the safety tests that apply to new chemicals. REACH levels the playing field, applying the same information standards to all chemicals, regardless of how long they have been on the market. Furthermore, REACH makes it easier to introduce new chemicals, by requiring a smaller number of tests than are required under current law. So, far from making it harder to introduce a new chemical, REACH facilitates and encourages innovation. From the perspective of chemical users, that means that REACH will encourage chemical companies to offer you new, and safer, chemicals for use in your business.

#### Will there be a delay if I want to start using a chemical in a new way?

Probably not. Chemical manufacturers and importers have an incentive to make sure their chemicals can be used in a broad range of settings. If you discover that your supplier has not registered a particular use, you can notify the supplier, who must respond within a month. Finally, as we have discussed above, if you do not want to inform the supplier about a specific way you are using a chemical, you can carry out your own chemical safety assessment. This exercise will be simple, provided that there is enough information to show that the new use is safe. There could be delays if the new use is not clearly safe. This is a benefit of the regulation – unsafe situations are identified in advance, rather than after the fact.

#### Will the authorization provision cause delays?

Again, this is unlikely. If you are already using a chemical that is subject to authorization, you can keep on using it while applying for authorization. A delay could arise if you want to undertake a new use for a chemical that has already been identified as being of very high concern. Again, this is a benefit – if a chemical is extremely dangerous, special care should be taken before introducing new uses of that chemical.

### QUICK FACT

#### Rate of Turnover in Chemical Use

A recent study looked at changes in chemicals use in Sweden over a period of five years.<sup>27</sup> Looking at the period from 1997 to 2002, the study found that there was little change in the total number of chemicals in use in Sweden. However, there was rapid turnover in which chemicals were used.

Roughly the same number of chemicals were used in Sweden at the beginning and end of the period, but they were not, in all cases, the same chemicals. Of the 11,694 chemicals registered in 1997, about 15% were no longer registered for current use five years later. This finding suggests that industry is already accustomed to a certain amount of change: companies often switch from one chemical to another. It is possible that REACH will affect what chemicals are chosen without increasing the total rate of change in chemical use.

# ■ Making the most of REACH: What's in it for business?

As a user of chemicals, you will benefit from REACH in the form of greater access to information, reduced liability exposure, reduced worker protection costs and improved worker health, increased trust from consumers, improved reputation, and advantages in international competition. We look at several of these benefits in the discussion below.

## 1. Access to information

*TODAY*, Chemical manufacturers are not required to produce safety information on most of the chemicals they produce. Downstream users are often forced to make guesses about chemical safety based on poor-quality safety data sheets, or carry out expensive safety tests themselves.

*WITH REACH*, downstream users will receive clear information from their suppliers on chemical hazards, and on the measures that are necessary to minimize risk.<sup>22</sup>

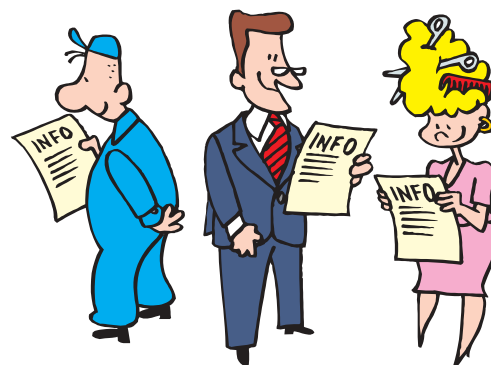
**ROOM FOR IMPROVEMENT:** As currently written, REACH gives information to **downstream users** but not to **article users** (see REACH Vocabulary, p. 7). Article users need information too, so this provision should be revised. In addition, the testing requirements for chemicals below 10 tonnes are quite weak in REACH, and should be strengthened.

Under REACH, chemical suppliers will have to tell you about the health and environmental effects of the chemicals they sell. With this information, you will be able to make informed decisions about what chemicals to use.

Currently, downstream users get information through safety data sheets (SDSs), but these documents are incomplete in many ways. In general they contain very little information on ecotoxicology, and many safety data sheets contain outright errors.<sup>23</sup> Under REACH, downstream users will continue to receive SDSs, but these documents will be significantly more useful than they are today. It will be easier for chemical manufacturers and importers to create a useful, complete SDS because they will have full information about the chemicals they sell. The SDS for each chemical will be required to match the chemical safety assessment (CSA).<sup>24</sup>

The new flow of information both up and down the supply chain will also help to spark innovation.<sup>25</sup> In the current system,

chemical producers often lack information on how their products are being used. Under REACH, chemical producers will receive information on how their chemicals are being used, and will be able to engage in research and development that is targeted accordingly.



## The Costs of Ignorance: Case Study of PCBs<sup>26</sup>

Our experience with PCBs shows the tragic effects, and the high costs, of failing to carry out safety tests on a chemical before marketing it.

Polychlorinated biphenyls (PCBs) have been used since the 1920s. Because producers did not test PCBs before selling them, people used them widely in industry and construction. PCBs have been used in a broad range of applications, ranging from use as lubricants in electrical equipment to seam sealants in buildings.

We now know that PCBs are harmful to human health and to wildlife, and they are very persistent in the environment. They have been linked to reproductive problems in wild animals, and to developmental and learning problems in humans. Now we are working to get rid of PCBs, but this is a difficult and costly venture.

A recent study looked at the costs of dealing with PCB pollution in Europe. The researchers collected detailed cost information on Sweden, and then extrapolated to develop a cost estimate for the 25-member EU. The study considered costs of research on PCBs; costs of removing PCBs from seam sealants and insulated window glass panes in buildings; costs of handling hazardous waste; and costs of cleaning up soil and sediments.

The study finds that for the years 1971 to 2018, the cost of dealing with PCB contamination will add up to at least 15 billion Euros for the 25-member EU. This is three to five times the total cost of implementing REACH over 11 years!

There were many categories of costs that the researchers did not look at. Their cost estimates would have been higher if they had looked at damage to the fishing industry, costs of decontaminating high voltage cables and several other categories of equipment, and costs of treating people who have become ill or disabled due to PCB exposure. Also, the study did not look at costs beyond the year 2018, but the effects of PCBs will almost certainly persist beyond this date.

The companies that manufactured and imported PCBs do not bear the full burden of these research, cleanup, and hazardous waste management costs. Instead, these costs fall on individual families, on government agencies, and on downstream users, such as construction companies. Many or all of these costs could have been avoided, if the manufacturers and importers had tested PCBs before putting them on the market.

## ROOM FOR IMPROVEMENT

### Information for article users

REACH guarantees that downstream users will receive safety data sheets (SDSs) with essential safety information. Article users further down the supply chain, however, are not guaranteed access to these materials. For example, REACH guarantees that textile manufacturers will have access to information on the health effects of dyes they use, but it doesn't guarantee any information to the companies that use or sell these textiles.

Article users need to have access to information on the chemicals to which their workers and customers may be exposed. If you are a user of articles, join the debate over this aspect of REACH to make sure you get the information you need and deserve.

### Accurate classification and labelling

As currently written, REACH requires manufacturers and importers to conduct only a small number of tests on chemicals produced between 1 and 10 tonnes per year. In addition, the current

version of REACH does not require creation of a chemical safety report (CSR) at these volumes. Concerns have been raised that with such minimal testing requirements, it will be impossible to classify and label these chemicals correctly. The previous version of REACH, proposed in May 2003, had stronger requirements for testing and CSRs; these requirements should be reintroduced in the final version of the legislation.

A recent study looked at the costs of REACH and an alternative known as "REACH Plus."<sup>27</sup> The study found that strengthening the testing and registration requirements to fill certain important gaps would increase the eleven-year compliance cost only slightly, from €315 million to €361 million per year.<sup>28</sup>

### Article User Case Study: The Need for Safety Information at H&M<sup>29</sup>

H&M is a major vendor of clothing and cosmetics, with more than 1000 stores in 20 countries; its largest market is in Germany. As an importer and manufacturer of articles, H&M tries to ensure the safety of its products and the manufacturing processes used to create them. One element of this effort is H&M's Chemicals Restriction list, a list of chemicals that the company bans or restricts from its purchasing. H&M asks its suppliers to guarantee that their products are free of the substances it has identified as hazardous.

In this effort, access to information throughout the supply chain is crucial. H&M's ability to ensure safety is a function of how much information it can get about the chemicals used to make its products. According to a statement by H&M, the lack of complete information creates business risks for the company. If a chemical used in producing H&M's textiles or cosmetics turns out to be dangerous, the company's reputation will suffer. Right now, H&M bears the burden of trying to fill in the information gaps regarding chemicals produced and used upstream. According to an H&M statement, "If we can not rely on the supplier's information, we must do the job ourselves."

*"At present, H&M bears a large financial burden of controlling and supervising the chemicals used 'upstream' during manufacture."*



## 2. Less exposure to liability claims

*TODAY*, downstream users can be held liable for harm to workers, consumers, or the environment if they use chemicals that turn out to be unsafe.

*WITH REACH*, chemical manufacturers and importers will give downstream users information on how to handle chemicals safely, helping users to avoid liability problems in the future.

**ROOM FOR IMPROVEMENT:** REACH could be strengthened to place more responsibility on manufacturers and importers for ensuring that they sell safe chemicals.

In the absence of legislation to protect them, some individual companies have taken the initiative to set safety standards for their suppliers. Some require that their suppliers avoid specific hazardous chemicals that are not yet regulated by law. In Britain, for example, the retailer Marks and Spencer sets safety standards for the chemicals used in dyes and bleaches, and Philips Sound has taken the initiative to avoid use of brominated flame retardants. REACH will make it easier for downstream users to establish safety and quality standards of this kind.<sup>30</sup>

### Room for improvement: Manufacturers and importers should have a general duty of care

The original draft of REACH, published in May 2003, included a provision for a general duty of care placed on chemical manufacturers and importers. This means that chemical manufacturers and importers are responsible for taking all the steps necessary to provide safe chemicals, even if these steps are not specifically required by law. For example, if pregnant women are exposed to a chemical that might cause birth defects, the manufacturer or importer must tell users about the risk, even if REACH does not require toxicity testing for that chemical. Under the revised draft of REACH, published in October 2003, this general duty of care is eliminated. To protect themselves from costly mistakes and liability, chemical users should push to have this clause reintroduced in the final version of REACH.



### Downstream Users Held Liable: the Case of Asbestos

Many downstream users have been held responsible for damages created by asbestos exposure. Liability claims have been particularly large in the United States. For example, in 1990 the conglomerate Asea Brown Boveri (ABB) purchased Combustion Engineering, a company that produced steam-boilers. Combustion Engineering is now being held responsible for the illnesses that resulted from exposure to asbestos that was used to insulate these boilers. The costs of this liability have mounted dramatically, sending Combustion Engineering into bankruptcy and causing serious problems for ABB. Costs are likely to exceed US \$1 billion.<sup>37</sup>

Other companies have had similar experiences; in the United States, more than 6,000 companies have been named as defendants in asbestos-related injury claims.<sup>32</sup> In France, a court ruling in 2002 found that companies that exposed their workers to asbestos dust were guilty of an "inexcusable error," allowing workers to file civil claims against their employers.<sup>33</sup>

Thus, the downstream users that purchased asbestos from manufacturers and importers upstream are bearing the burden of the vast damage to human health. Under REACH, the manufacturers and importers of an equivalent substance would have been required to define safe handling practices for the downstream users to follow.



### 3. Lower worker protection and compensation costs

**TODAY**, chemical users bear the costs of our collective ignorance about chemicals. Employers face high costs for protective equipment and protocols to decrease workers' exposure to hazardous chemicals on the job. When workers become ill from toxic exposures, employers face the expense of days lost, retraining, and compensation.

**WITH REACH**, chemical manufacturers will be responsible for giving users the information they need to protect workers and avoid costly mistakes. REACH will also encourage manufacturers to develop safer alternatives, helping to avoid the need for costly protective equipment.

**ROOM FOR IMPROVEMENT:** Serious health effects can occur even from a chemical produced in low volumes. As currently written, REACH requires only minimal testing for chemicals produced at less than 10 tonnes per year. Adding a few more tests to the requirements in this volume tier would make REACH significantly more useful.

Using toxic chemicals creates expense for chemical users, including costs for special protective equipment, monitoring for hazardous exposures, workers' compensation claims, and loss of working days when workers become sick.

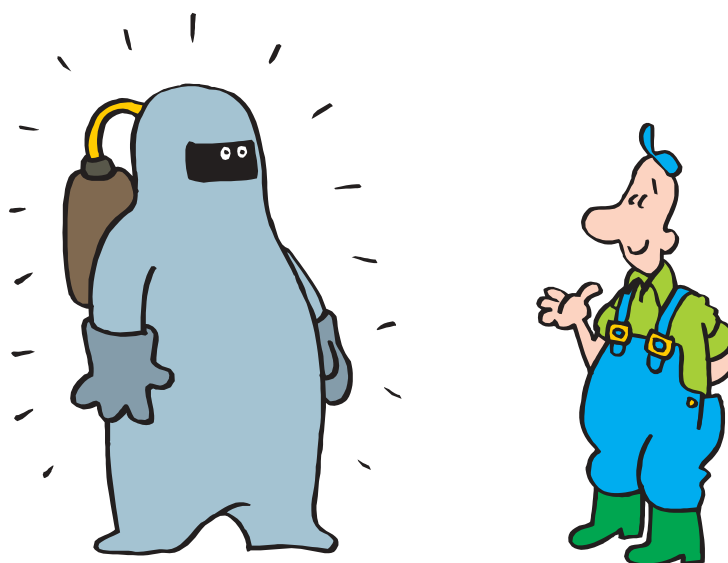
REACH will lower costs for chemical users by giving them the information they need to make good choices at the outset and avoid dangerous situations.

Health problems caused by chemical exposures at work create large costs for employers in the form of lost work days, employee turnover and retraining, and compensation payments to injured workers. For example, thousands of hairdressers in Germany have been sensitized by one chemical found in perm lotions, and have had to leave their work as a result. But chemical manufacturers and importers did not bear the costs of treating and retraining the injured workers. These costs were borne primarily by the hairdressing salons where the exposures took place.<sup>34</sup> These chemical users learned about the health effects of the chemical the hard way, by witnessing – and paying for – high

rates of illness among their employees. Under REACH, the chemical suppliers would have been responsible for telling them how to protect their workers.

A recent study estimated compensation costs for skin diseases and asthma caused by chemical exposures at work. These costs are estimated at €275 million in Germany. The cost of work days missed is estimated at about the same magnitude, likely doubling the total cost to employers.<sup>35</sup> In many cases these costs resulted from exposure to chemicals on which there was insufficient information. Testing could have identified these chemicals as sensitizers before people were exposed to them. Under REACH, companies will be able to make good decisions at the outset about what chemicals to use.

The Central Association of the German Construction Industry estimated the costs of work days lost due to cement dermatitis, a skin problem resulting from occupational exposure to cement containing chromates. The costs of days lost from work turned out to be greater than the costs of compensation, medical treatment, and occupational rehabilitation for injured workers.<sup>36</sup> Of course, the cost of lost work days is borne by the employer, not by the chemical suppliers upstream.



#### 4. Increased trust, secure reputation

*TODAY, consumers are highly suspicious of the chemicals used in a range of products.*

*WITH REACH, consumers will have greater confidence in the products sold by companies within Europe, knowing that these products contain only chemicals that have been tested and registered under a transparent and consistent set of rules.*

The population of the EU has become increasingly suspicious of chemicals over time. Every company has to think about its reputation with regard to product safety, if it is to gain and retain consumers.

In 1990, traces of the carcinogenic chemical benzene were found in Perrier water bottles. Perrier's market share in its most important market, the United States, fell to almost half its previous size in the wake of the benzene scandal, and Perrier spent US \$149 million working to repair its image.<sup>37</sup> Perrier is not a "downstream user" of benzene; the contamination occurred by mistake. However, this experience shows companies' vulnerability to the publicity surrounding hazardous chemical exposures.

In another case, in the late 1990s the construction company Skanska suffered the consequences of inadequate information on chemical inputs.<sup>38</sup> Skanska used a compound containing the toxic chemical acrylamide when building a railway tunnel. Work was halted when cattle and fish were found dead in the vicinity of the construction site. A number of workers at the site reported symptoms of nervous system damage.

Skanska paid compensation to the workers who had been most severely injured, as well as to local farmers and dairies. Skanska managers were also prosecuted for violation of Sweden's Work Environment Act.

As a downstream user, Skanska did not have full access to information on the health and environmental effects of the chemicals it was using in its work. Skanska managers should have taken greater care to detect and address the problem immediately, but their job would have been easier if they had received full information from their supplier. Under REACH, chemical users will have greater protection from this kind of mishap.



## 5. Competitive advantages

*TODAY, European companies may be missing key opportunities to be the first movers in adopting state of the art, safer production processes and products. The backlog of untested chemicals used in Europe means that companies can provide little in the way of a guarantee of the health and environmental profile of their products.*

*WITH REACH, European companies will be at the forefront of rising environmental standards in production. Consumers will know that products sold by European companies meet a high standard for safety and reliability.*

Companies can gain a competitive advantage in global markets by taking early steps to eliminate hazardous chemicals. For example, the Swedish paper industry adopted chlorine-free bleaching of pulp in the early 1980s. As demand for chlorine-free pulp production increased around the world, the Swedish paper industry was in a position to capture increased market share by using and exporting this technology.<sup>39</sup>

Another example is Greenfreeze, a non-CFC formulation used in refrigerators. When chlorofluorocarbons (CFCs) were found to be damaging the ozone layer, many firms switched from CFCs to related compounds such as HFCs or HCFCs. These chemicals did not create ozone problems, but they acted as powerful greenhouse gases. The companies had traded one environmental problem for another.

One firm, the German company Scharfenstein, took a different path. Scharfenstein never used CFCs. Instead, Scharfenstein used a technology based on hydrocarbons. Scharfenstein developed this technology into a product called Greenfreeze, which became highly successful commercially as the problems with CFCs and related compounds came to light. Beginning in 1994, all major European refrigerator manufacturers switched to a version of this technology.<sup>40</sup>

As higher environmental standards spread through the world economy, European companies will enjoy a “first mover” advantage. Moreover, European companies will be in the lead when better chemicals legislation is called for globally. It is worth noting that other countries have already begun to follow Europe’s lead in important aspects of environmental policy. For example, Japanese electronics companies are moving ahead

rapidly on creating safer electrical and electronic equipment in line with the requirements of European legislation, and REACH has sparked increased public debate on chemicals in the United States, with calls for similar chemicals policy reform in the US.

### Innovation Benefits

Some people say that REACH will get in the way of innovation. In fact, the opposite is true. In all respects, REACH is designed to promote and facilitate innovation. Our current regulatory system, in contrast, artificially favours old chemicals that have been grandfathered into the system.

Under the current regulatory system, chemicals that have been on the market since 1981 are subject to no testing or registration requirements, while newer chemicals are subject to relatively rigorous requirements. This means that “existing” chemicals are at an advantage, and there is a disincentive to innovate. REACH will foster innovation by creating a level playing field for all chemicals.

In addition, there are some special provisions to facilitative development of new chemicals. For example, substances manufactured for research and development can be exempt from registration requirements for five years, with the option to renew for an additional five years.<sup>41</sup>

## ■ What do other companies say about REACH?



A number of downstream and article users have publicly expressed their support for a strong REACH.<sup>42</sup>

Individual companies that have stated their strong support for REACH include:

- **Clothing and other Retail:** Marks and Spencer, a major retailer of clothing, food, and household items in the UK and Ireland;
- **Pharmacy:** Boots, a leading retailer of healthcare, cosmetic, and toiletry products in the UK and Ireland;
- **Construction:** Skanska Construction Company, a global construction services group with operations in many European countries; and
- **Household appliances:** Electrolux, the world largest producer of appliances for kitchen, cleaning and outdoor use.

A number of industry associations have also come out in favour of REACH. Examples include:

- **Consumer Cooperatives:** Euro Coop, representing national consumer cooperatives in 18 countries, or some 20 million individual consumers; and

- **Water Suppliers and Waste Water Services:** Eureau, the European Union of National Associations of Water Suppliers and Waste Water Services, representing national associations of water suppliers and/or waste water service providers across Europe.

Other downstream users need to add their voices to those that have already made a statement in favour of stronger chemicals regulation. If you are a producer or retailer of clothing, household items, construction products, packaging, or other products and services, find out how your business will benefit from REACH and make your voice heard now! If you do not speak up on this important issue, the only voices heard in the debate will be those of the chemical manufacturers and importers.

**Read more about what these and other companies have said about REACH in the report, "What we need from REACH", Chemsec 2005 ([www.chemsec.org](http://www.chemsec.org)).**

If you use chemicals in your business, or sell articles containing chemicals, you stand to gain from REACH in important ways. The benefits of REACH include:

- **More information about chemicals.** Under REACH, chemical manufacturers and importers will have to tell their buyers about the health and environmental effects of the chemicals they sell.
- **Less liability exposure.** Under REACH, chemical manufacturers and importers will give users information on how to handle chemicals safely. Following these guidelines will help chemical users to protect themselves from liability for costly mistakes.
- **Savings.** Using hazardous chemicals creates costs for downstream users, including the costs for worker safety equipment, workers' compensation claims, and loss of working days when workers become sick. REACH will lower costs by giving chemical users the information they need to avoid these costs.
- **Trust and Reputation.** REACH will help companies to maintain consumer confidence by ensuring that products are safe.

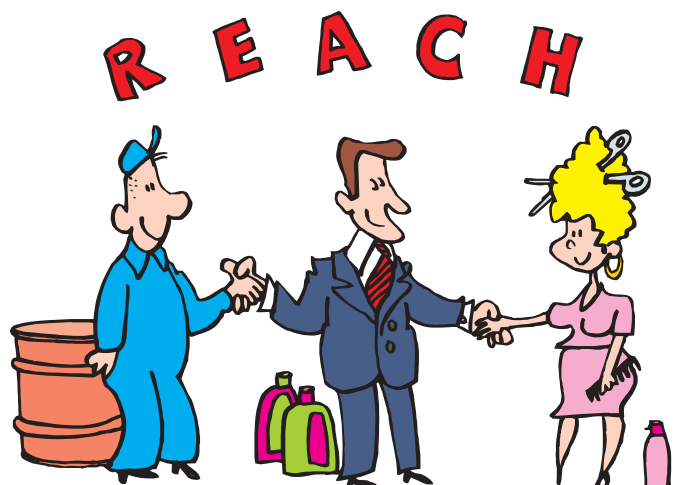
With REACH, Europe is leading the world in studying and regulating chemical safety. European business will gain the competitive advantage that comes from being able to advertise that its products are made with safer chemicals.

The negotiation of REACH has entered a crucial phase. Voices from industry will be central to ensuring that the final legislation is strong and effective. As a chemical user and a prime potential beneficiary of REACH, you have a key role to play in this process.

### How you can get involved

If you want to get involved in the debate, join the growing list of companies that have formally endorsed the goals of REACH. And if you want a stronger REACH, express your support for specific measures to strengthen the legislation.

For more information, contact Chemsec, Tel: +46 31 711 01 52, -57  
E-mail: [info@chemsec.org](mailto:info@chemsec.org) or look at [www.chemsec.org](http://www.chemsec.org).



## References

- Ackerman, Frank and Rachel Massey. "The True Costs of REACH" (Global Development and Environment Institute, Tufts University, report for the Nordic Council of Ministers, October 2004).
- Ahrens, Andreas. "Testing the REACH Procedures in Practice by Authorities and Companies in North Rhine-Westphalia, October 2003. Available at [http://www.oekopol.de/PDF/Chemie/REACH\\_simulation.pdf](http://www.oekopol.de/PDF/Chemie/REACH_simulation.pdf).
- Arthur D. Little, "Economic Effects of the EU Substances Policy," December 2002.
- Canton, Joan and Ch. Allen, "A Microeconomic Model to Assess the Economic Impacts of the EU's New Chemicals Policy," DG Enterprise, November 2003.
- Carroll, Stephen J. et al., "Asbestos Litigation Costs and Compensation: An Interim Report" (Santa Monica, CA: RAND Institute for Civil Justice, 2002).
- Chemical Legislation European Enforcement Network (CLEEN). "ECLIPS: European Classification and Labelling Inspections of Preparations, including Safety Data Sheets." Final Report, June 2004.
- Commission of the European Communities. "Proposal for a Regulation of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restrictions of Chemicals (REACH), establishing European Chemicals Agency and amending Directive 1999/45/EC and Regulation (EC) on Persistent Organic Pollutants; Proposal for a Directive of the European Parliament and of the Council amending Council Directive 67/548/EEC." (October 29, 2003) [COM(2003) 644 final] [SEC(2003) 1171]
- Commission of the European Communities. "Regulation of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restrictions of Chemicals (REACH), establishing European Chemicals Agency and amending Directive 1999/45/EC and Regulation (EC) on Persistent Organic Pollutants: Extended Impact Assessment." (October 29, 2003.) [SEC (2003) 117/3; COM (2003) 633 final]
- Dyckjaer, Sidsel et al. "REACH - A Leap Forward for Industry: Nordic Concerns and Benefits." (Nordic Council of Ministers and the Danish Ministry of the Environment, 2004).
- Harremoes, Poul et al. "Late Lessons from Early Warnings: The Precautionary Principle 1896-2000" (Copenhagen: European Environment Agency, 2001). Available at [http://www.chemsec.org/documents/Issue\\_Report\\_No\\_22.pdf](http://www.chemsec.org/documents/Issue_Report_No_22.pdf).
- Hansson, S.O. and C. Ruden. "What REACH Does and Does Not." In Hansson and Ruden, eds., *Better Chemicals Control Within REACH* (Stockholm: News Project, 2004).
- International Chemical Secretariat. "New Chemicals Policy in the EU: Good or Bad for Companies?" (May 2003). Available at [http://www.chemsec.org/documents/Good\\_or\\_bad.pdf](http://www.chemsec.org/documents/Good_or_bad.pdf).
- International Chemical Secretariat. "Cry Wolf: Predicted Costs by Industry in the Face of New Regulations," (April 2004). Available at <http://www.chemsec.org/documents/Cry%20wolf%20final%202004.pdf>
- International Chemical Secretariat. "What We Need from REACH: Business Views on EU's New Chemical Legislation," (January 2005). Available at <http://www.chemsec.org/documents/What%20we%20need%20from%20REACH.pdf>.
- Pearce, David and Phoebe Koundouri. "The Social Cost of Chemicals: The Costs and Benefits of Future Chemicals Policy in the European Union." WWF-UK, May 2003.
- Rühl, Reinhold, Niddatal and Henning Wriedt. "An Assessment of the Benefit of REACH," 2004.
- SRU (German Advisory Council on the Environment). "Environmental Report 2004: Ensuring Environmental Protection Capacity." Summary, July 2004: "Umweltgutachten 2004." Available at [http://www.umweltrat.de/02gutach/download02/umweltg/UG\\_2004\\_lf.pdf](http://www.umweltrat.de/02gutach/download02/umweltg/UG_2004_lf.pdf).
- UBA (German Federal Environmental Agency). "Analysis of the costs and benefits of the new EU chemicals policy." Summary, October 2004.
- Von Bahr, Jenny and Johanna Janson. "Costs of Late Action: The Case of PCB." (Stockholm: Green Index, 2004).
- Warhurst, A. Michael, *The REACH Files: A Policy Guide* (Brussels: WWF, December 2004). <http://www.panda.org/downloads/europe/reachfilespolicyguide.pdf>.
1. The KPMG case study (April 2005)
  2. "Commission of the European Communities. Extended Impact Assessment" (October 2003)
  3. REACH draft legislation (October 2003): Title VII: Authorization; Chapter 1: authorization requirement; Article 54.
  4. The full list of exemptions under REACH can be found in Annexes II and III of the proposed legislation, available at <http://europa.eu.int/eur-lex/en/com/pdf/2003/act0644eno3/2.pdf> (viewed February 2005).
  5. REACH draft legislation (October 2003): Titel I: Article 3.
  6. REACH draft legislation (October 2003): Title V: Articles 34, 35, 36.
  7. REACH draft legislation (October 2003): Title IV: Articles 29, 30, 31, 32.
  8. REACH draft legislation (October 2003): Title II: Chapter 2: Article 6: General obligation to register substances in articles.
  9. This example is drawn from A. Michael Warhurst, *The REACH Files: A Policy Guide* (Brussels: WWF, December 2004), p.63.
  10. Joan Canton and Ch. Allen, "A Microeconomic Model to Assess the Economic Impacts of the EU's New Chemicals Policy," DG Enterprise, November 2003, pp. 27-31.

11. CEFIC web site,  
[http://www.cefic.org/factsandfigures/level02/profile\\_index.html](http://www.cefic.org/factsandfigures/level02/profile_index.html):  
"Geographic breakdown of world chemical sales," viewed January 2005.
12. SRU (German Advisory Council on the Environment). "Environmental Report 2004: Ensuring Environmental Protection Capacity." Summary, July 2004; „Umweltgutachten 2004," p. 470. Available at [http://www.umweltrat.de/02gutach/download2/umweltg/UG\\_2004\\_lf.pdf](http://www.umweltrat.de/02gutach/download2/umweltg/UG_2004_lf.pdf).
13. Canton and Allen November 2003, pp. 27-31.
14. Frank Ackerman and Rachel Massey. "The True Costs of REACH" (Global Development and Environment Institute, Tufts University, report for the Nordic Council of Ministers, October 2004), pp. 40-41.
15. European Commission, REACH extended impact assessment, Oct 29, 2003.
16. Warhurst 2004, p. 42.
17. Warhurst 2004, p. 44-45.
18. This section is adapted from Warhurst 2004.
19. Adapted from Warhurst 2004.
20. Adapted from Warhurst 2004.
21. Ackerman and Massey 2004, pp. 31-32.
22. Warhurst, 2004.
23. Chemical Legislation European Enforcement Network (CLEEN). "ECLIPS: European Classification and Labelling Inspections of Preparations, including Safety Data Sheets." Final Report, June 2004.
24. REACH draft legislation (October 2003): Title IV: Article 29.
25. Warhurst. p. 36.
26. Jenny Von Bahr and Johanna Janson, "Costs of Late Action – the Case of PCB" (Stockholm: Green Index, 2004).
27. Ackerman and Massey 2004.
28. Ackerman and Massey 2004.
29. "Business Benefits for H&M within REACH." In International Chemical Secretariat, "What We Need from REACH: Business Views on EUs New Chemical Legislation," 2005.
30. International Chemical Secretariat, "New Chemicals Policy in the EU: Good or Bad for Companies?" May 2003, p. 13
31. "ABB Asbestos Case to be Reviewed," December 3, 2004. Available at <http://www.newmaterials.com/news/667.asp>, viewed January 2005.
32. Stephen J. Carroll et al., *Asbestos Litigation Costs and Compensation: An Interim Report* (Santa Monica, CA: RAND Institute for Civil Justice, 2002), pp. vi, vii.
33. Reinhold Rühl and Henning Wriedt, "An assessment of the Benefits with REACH", 2004, p 937. Rühl and Wriedt 2004, p. 7.
34. Rühl and Wriedt 2004, p 10.
35. Rühl and Wriedt 2004, p. 9.
36. Rühl and Wriedt 2004, p. 9.
37. International Chemical Secretariat, "New Chemicals Policy in the EU: Good or Bad for Companies?" May 2003, p. 8.
38. "Skanska accused of violating Work Environment Act," European Industrial Relations Observatory On-line, <http://www.eiro.eurofound.eu.int/1999/05/inbrief/se9905162n.html>; "Skanska managers found guilty of work environment crime," European Industrial Relations Observatory On-line, <http://www.eiro.eurofound.eu.int/2002/02/feature/se0202106f.html>, viewed December 2004.
39. International Chemical Secretariat, "New Chemicals Policy in the EU: Good or Bad for Companies?" May 2003.
40. International Chemical Secretariat, "New Chemicals Policy in the EU: Good or Bad for Companies?" May 2003, p. 10.
41. REACH draft legislation (October 2003): Title II: Article 7.
42. Examples are drawn from [http://www.panda.org/campaign/detox/the\\_solution/industry.cfm](http://www.panda.org/campaign/detox/the_solution/industry.cfm) and from International Chemicals Secretariat, "What We Need from REACH."

The debate about EU's proposal for a new chemicals policy, REACH, is now in its final stages. Will the final policy help or hurt your company? Now is the time to get informed and get involved. This guide will give you the information you need to start making your voice heard in the debate – and show you why your input is needed. In this report, you will find out about the specific ways you can gain from REACH, the concerns that some companies have expressed about the regulation, and the ways you can get involved in this important policy discussion.

The debate about REACH has been heated. Some people say the regulation is too ambitious, while others say it does not go far enough. The concerns of chemical users are frequently cited in the course of the debate. But for the most part, chemical users themselves have not taken an active role. Instead, others have spoken for them. As a result, the interests of chemical users have sometimes been misrepresented. The debate about REACH is now in its final stages. Will the final policy help or hurt your company? Now is the time to get informed and get involved. This guide will give you the information you need to start making your voice heard in the debate – and show you why your input is needed. In this report, you will find out about the specific ways you can gain from REACH, the concerns that some companies have expressed about the regulation, and the ways you can get involved in this important policy discussion.