



Briefing on DG ENV study Benefits of REACH

February 2006

On 15 February DG ENV published a report which seeks to estimate the potential benefits of REACH for the environment and human health. Entitled 'The impact of REACH on the environment and human health' the report uses three different approaches to calculate the potential benefits of REACH. The report concludes that REACH would bring environmental benefits of up to €50 billion over 25 years. This calculation is in addition to the €50 billion health benefits over 30 years already identified by the Commission when its proposal was published. The benefits are based on the Commission proposal reducing costs by just 10% - were REACH strengthened to include mandatory substitution then the benefits would increase exponentially.

Summary of cost benefits and savings:

1. **Known past costs comparison: €52 billion savings**

If one looks at the past costs associated with just four well known chemicals (1,2,4-trichlorobenzene in drinking water, nonylphenol in sewage sludge, tetrachloroethylene in ground water and PCBs in fish) - and then compares them with chemicals of similar or higher concern still in use today – then REACH will save **up to €52 billion** over 25 years by:

- avoidance of severe health effects: **up to €50 billion**
- improved reuse of sewage sludge: **up to €2.6 billion**

This is calculated using the “Damage Function” approach. The impact of the four substances were examined in detail and were then compared to many substances still in use today which seem to be of similar or higher concern.

2. **Clean-up cost savings: €8.9 billion**

If one looks only at the costs saved as a result of REACH for things such as drinking water purification, sewage disposal etc then the benefit can be calculated at **up to €8.9 billion** over 25 years. The “Avoided or Saved Costs” approach was used to assess the current costs of mitigating the chemical pollution for a number of cases:

- drinking water purification savings: **up to €5.56 billion**
- savings from building sewage treatment plants: **up to €440 million**
- disposal of dredged sediment savings: **up to €1.45 billion**
- sewage sludge disposal savings: **up to €1.52 billion**
- cleaning of fish meal savings: **up to €16 million**

3. **Clean drinking water: €34 billion benefits**

If one looks only at benefits that REACH may bring to drinking water then the benefit can be calculated at **€34 billion** over 25 years. This is calculated using the “Willingness to Pay” approach. Interestingly, this study looks only at the willingness to pay for clean drinking water. Were the willingness to pay for avoiding morbidity and mortality caused by pollution included in the calculation, then the figure would be significantly higher.

Implications for REACH

Whichever approach is taken the benefits far outweigh the costs of REACH to the chemical industry – estimated to be around €2.3 billion over 11 years (range €1.9 billion - €3.2 billion). Therefore, at Second Reading, Members of the European Parliament and the Council should reverse the continual weakening of REACH and agree that:

- **chemical manufacturers provide the necessary safety information to identify chemicals of high concern, and**
- **all chemicals of high concern are replaced by safer alternatives whenever they exist.**

This is the only way the economic, human health and environmental benefits identified above will be realised.

The report stresses that it would be unwise to combine the three different calculations. A number of experts were involved with the study from notable institutions such as the OECD, Finnish Institute of Occupational Health, Agricultural University of Norway and the University of Nijmegen. The authors of the report included experts from University College London and the University of Reading.