

# BENCHMARKING TRENDS: ENVIRONMENTAL LIABILITY DIRECTIVE DRIVES SHIFT IN PURCHASING OF ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE

The past decade has borne witness to a tightening of the environmental regulatory framework under which companies in Europe are required to operate, including the implementation of the European Union’s (EU’s) Environmental Liability Directive (ELD) and the development of individual, member-state legislation to embed the spirit of the ELD locally.

In addition to the potential for businesses to cause pollution, which can cause damage to property, bodily injury to third parties, or damage to the environment, the ELD has imposed new liabilities for environmental damage on many companies operating within the EU. As well as preventing significant environmental damage from occurring, the ELD requires operators to restore the environment back to its baseline condition in those instances where damage has occurred.

The ELD is therefore based on both the “precautionary” and the “polluter pays” principles, whereby operators of a potentially hazardous activity are expected to take all action necessary to prevent and, where necessary, to remediate any environmental damage they cause. The requirements to both estimate the costs that may be incurred in preventing significant environmental damage, and to remedy any damage that does occur, have led to a rise in environmental impairment liability (EIL) insurance being sought to cover potential environmental liabilities.


**SPOTLIGHT**
**GREATER LIABILITY**

Fully implemented in 2010, the ELD introduced the polluter pays principle for environmental damage across Europe, as well as a change in the scope of remedial measures required following an environmental damage event. Should it not be possible for a damaged habitat to be restored back to its baseline condition, then the polluter will be required to undertake additional habitat restoration projects elsewhere in order to compensate the environment for the damage caused.

Potentially, this may include the requirement to undertake interim measures while the clean-up and rehabilitation of damaged habitats is undertaken, and may even extend to the creation of alternative habitats elsewhere.

## 13.6%

Annual average growth in the uptake of operational EIL insurance policies for all sectors.

## 8%-15%

Annual average growth in indemnity limits sought in sectors with strict environmental damage liability.

## 18.9%

Annual average growth in uptake of EIL insurance in high-risk (for example, energy) businesses.

## 6.3%

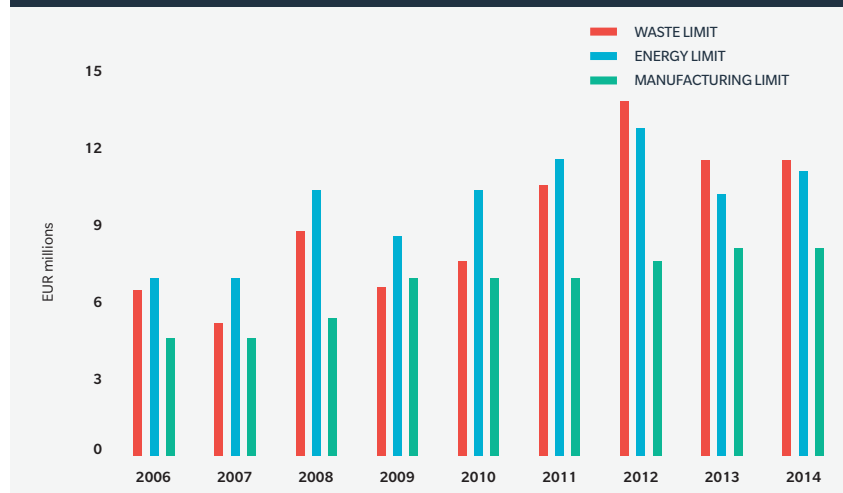
Annual average growth in uptake of EIL insurance in low-risk (for example, real estate) businesses.

For those companies carrying out dangerous activities listed in Annex III of the ELD, the limits of indemnity sought increased at an annual rate of between 8% (manufacturing) and 15% (energy).

### INCREASED LIMITS SOUGHT BY BUSINESSES WITH THE POTENTIAL FOR A STRICT LIABILITY FOR ENVIRONMENTAL DAMAGE

The buying patterns of those organisations purchasing EIL insurance have also changed in response to the ELD. For those businesses operating in sectors with the potential for a strict liability for environmental damage, such as energy, waste, and industrial manufacturing, the average limits of indemnity being sought increased in the time period between 2006 (prior to the implementation of the ELD) and 2014.

**FIGURE 1** Average Limits of Indemnity for Energy, Waste, and Manufacturing Risks  
Source: Marsh



For those companies carrying out dangerous activities listed in Annex III of the ELD, this increase occurred at an annual rate of between 8% (manufacturing) and 15% (energy). The limits of indemnity sought by companies in the waste sector increased at close to 9% per annum.

Limits of indemnity for energy risks, such as operational downstream oil facilities, oil storage, and power generation, generally increased between 2006 and 2014. Overall, there was a 35% increase in the limits of indemnity being obtained in this sector, from around EUR8 million between 2006 and 2008, up to around EUR11 million between 2011 and 2014.

For companies operating in the waste sector, the limits of indemnity sought were relatively stable between 2006 and 2009, averaging between EUR5 million and EUR8 million. A year-on-year increase in the limits of indemnity being sought by companies in the waste sector first occurred in 2010 and continued until 2012. Between 2012 and 2014, the limits of indemnity sought averaged between EUR11 million and EUR13 million.

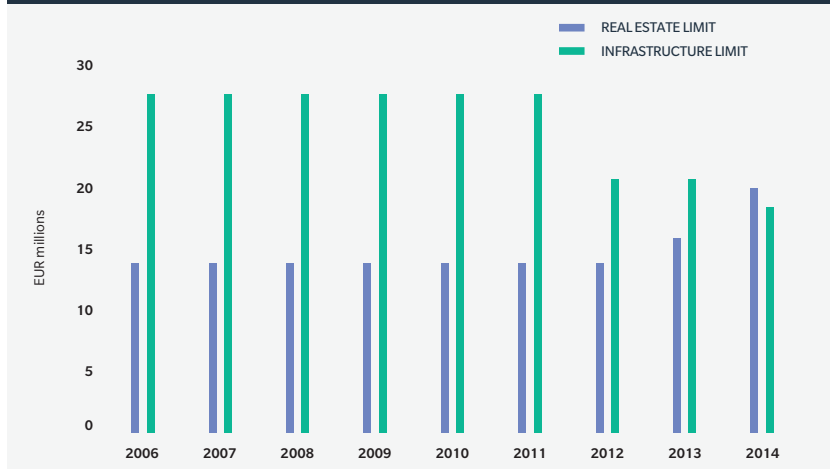
There appears to have been a steady rise in the limits of indemnity being obtained by manufacturing companies between 2006 and 2014, which rose from an average of EUR4.5 million in 2006, up to slightly more than EUR8 million in 2014. This represents an increase of close to 8% per annum during the period.

## LIMITS SOUGHT BY BUSINESSES WITH FAULT-BASED LIABILITY FOR ENVIRONMENTAL DAMAGE ARE STABLE OR HAVE REDUCED

The limits of indemnity on environmental insurance policies obtained by companies operating in sectors where there is fault-based liability for environmental damage (not Annex III), such as infrastructure and real estate, were either stable or reduced in the period between 2006 and 2014. In more recent years (2013 and 2014), however, the limits of indemnity sought by real estate clients have been increasing.

**FIGURE 2** Average Limits of Indemnity for Infrastructure and Real Estate Risks

Source: Marsh



Average limits of indemnity for operational risk policies for infrastructure remained stable (at between EUR25 million and EUR30 million) up until 2011, reducing between 2012 and 2014 to around EUR17 million. The stability being sought between 2006 and 2011 was due to a small number of policies for large infrastructure assets being renewed on an annual basis.

In the real estate sector, average limits of indemnity sought were stable between 2006 and 2012, before increasing in 2013 and 2014 to around EUR20 million.



### SPOTLIGHT

#### 10 TO 40 TIMES THE COST

A report<sup>1</sup> published by the French government analysed the costs of several environmental damage incidents in the 1990s and compared them with the estimated cost of clean-up required today under the auspices of the ELD. In one example incident, a fire in a sodium chlorate plant resulted in extensive pollution of a local river and the destruction of the surrounding natural habitat. The costs of clean-up at the time were estimated to be around EUR10,000 (in today's money), whereas under the ELD regime the estimated cost of clean-up would have been around EUR4 million if undertaken today.

In a separate case, caused by the release of chemicals from a ruptured drainage pipe at a paper mill, the resulting damage was the total destruction of almost all the fauna and flora in the receiving waters. The cost of clean-up at the time was around EUR42,000. The expected cost of clean-up under the ELD should the same incident have occurred today was estimated as being up to EUR425,000.

Clearly, under the current environmental liability regimes put in place to protect the environment and prevent the loss of biodiversity, the liabilities of business have increased by between 10 to 40 times, with costs of clean-up being defined with reference to an environmental baseline of environmental quality.

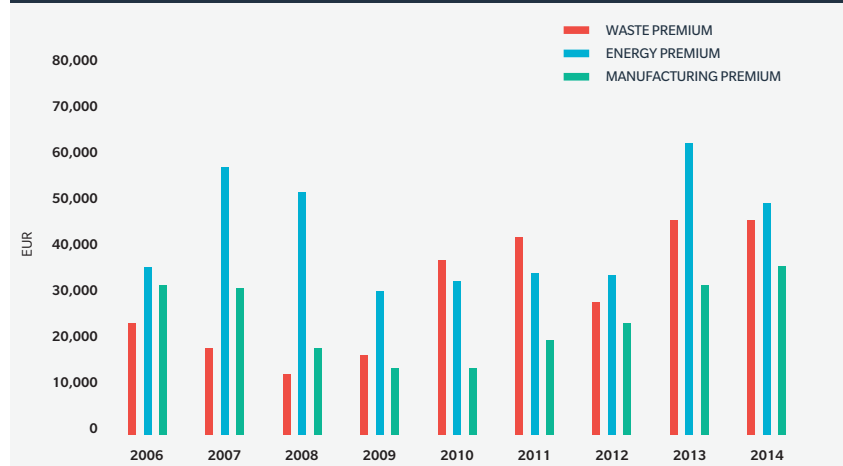
<sup>1</sup> La directive "Responsabilité environnement" et ses méthodes d'équivalence, Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer, April 2000.

For those businesses operating in sectors with a strict liability for environmental damage, premiums generally reduced between 2006 and 2009, and are now increasing in all three sectors.

### PREMIUM RATES HAVE INCREASED FOR BUSINESSES WITH THE POTENTIAL FOR STRICT LIABILITY FOR ENVIRONMENTAL DAMAGE

Premium trends for environmental insurance policies obtained between 2006 and 2014 have been reflective of the sectors in which the purchasers operate. For those businesses operating in sectors with a strict liability for environmental damage, average premiums generally reduced between 2006 and 2009, and are now increasing in all three sectors. The increase in average premium for companies in these sectors on operational environmental risk policies is reflective of the increase in perceived risk.

**FIGURE 3** Average Premium Paid for Energy, Waste, and Manufacturing Risks  
Source: Marsh



Average premiums for environmental insurance policies for companies in the energy sector recorded a slight increase between 2006 and 2008, before reducing to a stable level between 2009 and 2012, even though the limits of indemnity being sought by these companies in the same period were increasing. The recent rise in the average premiums being paid for environmental insurance policies by energy businesses reflects the rise in premium rates for certain types of high-risk businesses in this sector.

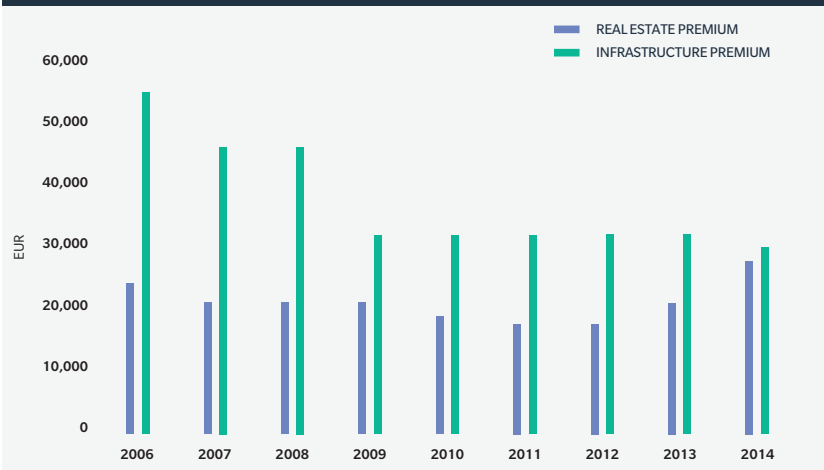
Companies operating in the waste sector experienced a steady increase in average premiums between 2009 and 2014, which was reflective of the increase in the limits of indemnity being sought by clients in this sector.

The average premiums for environmental insurance for companies in the manufacturing sector reduced between 2006 and 2010, when the limits of indemnity being sought were relatively stable. The rise in average premiums between 2011 and 2014 is reflective of an increase in the limits of indemnity being sought by these types of businesses during that period.

## PREMIUM RATES HAVE DECLINED FOR BUSINESSES WITH FAULT-BASED LIABILITY FOR ENVIRONMENTAL DAMAGE

The average premiums for companies in those sectors where a fault-based liability for environmental damage is inferred by the ELD were stable or reduced slightly between 2011 and 2014. The recent rise in premiums in the real estate sector is reflective of the increased limits of indemnity being sought.

**FIGURE 4 Average Premium Paid for Infrastructure and Real Estate Risks**  
Source: Marsh



The average premium for environmental insurance for operational risk policies for infrastructure businesses witnessed a steady decline between 2006 and 2014, with a stabilisation of average premiums in the same period. The stabilisation of premiums – occurring as it did during a time in which businesses were seeking lower limits of indemnity – would suggest that a minimum premium level has been reached on a number of these assets where only fault-based liability of environmental damage is inferred by the regulations.

In the real estate sector, the average premium for EIL insurance fell between 2006 and 2012. The recent rise in average premium for environmental insurance for this sector is reflective of the increased limits of indemnity being sought by companies in 2013 and 2014.



### SPOTLIGHT

#### EIL vs GL

Some general liability (GL) policies may have evolved to include certain environmental liability exposures in recent years; however, a typical EIL policy offers the following coverages not found in GL policies:

- Third-party bodily injury and property damage, caused by gradual pollution.
- On-site clean-up costs, sudden and accidental pollution.
- On- and off-site environmental damage.
- On- and off-site clean-up costs and environmental damage, gradual pollution.
- Transportation environmental damage, sudden and accidental pollution.
- First-party business interruption, extra expenses, emergency response costs.
- Cost to undertake preventative measures.



## SPOTLIGHT

ALUMINA PLANT  
ACCIDENT

The retaining wall of a large liquid waste storage reservoir associated with an alumina production plant in Hungary suffered a catastrophic failure. The incident, which followed a prolonged period of heavy rain, led to the escape of liquid waste, in the form of 500,000 cubic metres of red-coloured toxic sludge, into the immediate surrounding environment.

The sludge spill event is reported to have contaminated over 40 square kilometres of land, with measured effects on four major rivers and causing serious pollution migrating across a number of international borders. Estimates, where available, have suggested that the cost of cleaning up the resultant contamination was in the order of “tens of millions of dollars,” and the remediation work took more than one year to complete.

## CONCLUSION

The scope and scale of environmental legislation has increased across Europe in recent years, following the implementation of the ELD. As a result, operators are expected to prevent significant environmental damage from occurring, and, where damage has unfortunately occurred, to restore the environment back to its baseline condition.

Companies have, therefore, diverted resources to developing robust environmental risk management solutions designed to mitigate the specific environmental risk issues that could be envisaged, and have bought specialist EIL insurance to transfer their environmental liabilities.

In the years leading up to, and following, the ELD’s full implementation, European demand for operational EIL insurance policies has increased – by a total of 13.6% across all sectors between 2007 and 2014<sup>2</sup>.

Businesses operating in the energy, waste, and industrial manufacturing industries (industries with a strict liability for environmental damage, as listed in Annex III of the ELD) have increased the limits of indemnity on their operational risk environmental insurance policies in response to the implementation of the ELD. This makes them better placed to respond to the obligations set out in the ELD and respond accordingly in the event of an incident taking place.

While premiums generally reduced for energy, waste, and industrial manufacturing risks between 2006 and 2009, they are now increasing in all three sectors. This is indicative of an increase in the perceived risk to businesses operating within these industries.

<sup>2</sup> According to the increase in (compound annual growth rate) Marsh clients purchasing EIL cover during this period.



## ABOUT THE DATA CONTAINED WITHIN THIS REPORT

Marsh has assisted clients to assess the environmental risks inherent in projects and operations for more than a decade, and has consequently maintained a database of information on the EIL insurance policies which have been placed for clients during this period. This database now comprises more than 700 distinct environmental insurance policies for clients operating in numerous industry sectors throughout the EU.

For the purpose of this report, we have used the data pertinent to the environmental insurance policies placed for:

- Companies based in, and with operations in, Europe only.
- Operational (new conditions) risk policies only (that is, not historic liabilities policies or policies covering contracted operations for construction projects).
- Annual policies and policies with a short policy term of three years or fewer.
- Policies placed between 2006 and 2014, where the start date of the policy (inception date) is used.

For the purpose of this report, those industries with strict liability under the ELD as defined by Annex III of the Directive include:

- Energy – including downstream oil, gas processing and transmission, power generation, and energy industry service companies, such as tank farm operators and maintenance contractors.
- Waste – including those companies in the waste management sector (domestic and industrial waste) and in waste treatment.
- Manufacturing – including those companies involved in industrial and heavy manufacturing, where the handling and storage of large quantities of hazardous substances may be inferred.

The following industries are not in Annex III; therefore, only a fault-based liability can be inferred:

- Infrastructure – which includes the operation, but not the construction of large-scale infrastructure assets such as airports, ports and terminals, roads, and railway systems.
- Real estate – which includes the ownership and maintenance of existing real estate assets such as shopping centres, warehouses, offices, and light industrial business parks.

If you would like to discuss further the potential environmental risks for your company, please contact:

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