

An Anglo-German Foundation Report

# **Understandings of Environmental Risk in Two Industrial Towns: A comparative study in Grangemouth and Ludwigshafen**

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## **Executive Summary**

### **Background**

The importance we attach to 'risk' in our daily lives has changed greatly over the past two decades across Europe. Government and public negotiate risk concerns as never before in the policy process. Yet we still know little about the varying ways people actually live with different environmental risks in different countries. This project takes an anthropological approach, using intensive fieldwork to examine attitudes and values in two industrial towns: Grangemouth (Scotland) and Ludwigshafen (Germany). It explores the contrasts and similarities in the ways that people deal with risk in two towns built around substantial petroleum and chemical industries, each undergoing rapid change.

Britain and Germany are often said to attach different weight to environmental issues, with Germany seen as the more environmentally concerned and risk conscious. But is such a difference reflected in the life of individual industrial towns or cities? Selecting Ludwigshafen (population 165,000) on the River Rhine, and Grangemouth (population 18,000), in central Scotland, allowed us to compare towns whose residents have long been used to living alongside hazardous industries. Although Ludwigshafen is larger, with a more diverse population, both have been prominent chemical and petrochemical towns for several generations. Each is home to a number of companies, but dominated by one major one: BASF in Ludwigshafen, dating back to 1865, and BP in Grangemouth, dating back to 1924.

The purpose of this research has been to provide an analytical description of discourses of environmental risk in two towns whose entire histories have been shaped by industries commonly regarded as inherently hazardous. Our aim has been to use ethnographic

methods as a sensitive means to connect individual perceptions, attitudes and concerns with wider public or semi-public debate about safety, health, security and the future in both towns. By placing public views alongside the perspectives of industry, regulators, planners and public health staff, we aim to present an ongoing local 'conversation' about risk in the life and politics of each town. By design, a social scientist from Germany (Dr Achim Schlueter) did the Grangemouth study, while a social scientist from Britain (Dr Patricia Bell) did the Ludwigshafen study.

### **Research findings**

In both towns, people voiced more concern about the impact of accidents than routine pollution or health risks. In Grangemouth, industry was the issue. Residents focused on BP's recent safety record, the safety implications of massive redundancies, and unwelcome planning applications by other chemical companies. Behind these concerns was anxiety about the town's future safety and economic vitality. In Ludwigshafen, industry was not an issue to the same extent. Traffic was seen as a more immediate environmental problem. However, echoing Grangemouth, BASF's use of sub-contracting was starting to create unease about safety as well as job security. Similarly, recent cutbacks in public services, as Ludwigshafen Council adjusted to a big fall in revenue after changes in the taxation of industry, were leading to new questioning of the town's industry. Yet overall, while people in Ludwigshafen generally emphasised how the town's environment had improved over time, people in Grangemouth were likely to emphasise what had got worse.

When people in either town talked about risk, they spoke of trust, along with familiarity, loyalty and obligation. Yet the two towns presented very different pictures. In Ludwigshafen, the chemical industry was trusted because BASF enjoyed wide public trust and pride. Even so, limits to this trust were increasingly apparent, as a more sceptical attitude to corporate safety claims was emerging. By contrast, in Grangemouth, public trust in industry was in short supply. BP may still have commanded loyalty because of its history in the town, but trust in industry procedures and intentions was being eroded. Regulators were criticised, not only for too cosy a relationship with BP and other companies, but equally with limiting Grangemouth residents to a mere token role in decision-making affecting their town.

Our research did not compare regulatory frameworks but concentrated on the views about regulation expressed by regulators and regulated alike. This proved a more sensitive topic in Ludwigshafen than Grangemouth. Despite the strong regulatory ethos in Germany, the sheer size of BASF posed unusual problems. How could public authorities, comparatively under-resourced, maintain oversight of a corporation which possessed all the necessary expertise to do the task more effectively itself? Grangemouth's regulators perceived themselves as having more influence and exerting more effective oversight of industry now than in the past. They viewed their most difficult task nowadays as dealing with public disillusionment and a new insistence by residents on being heard.

In Grangemouth, the recent mood of distrust has fuelled assertive campaigns against chemical storage planning applications and in favour of diversifying employment, even though national environmental organisations have not had a high profile in the town. Grangemouth residents have argued against plans they fear would further stigmatise

their town as a chemical 'dumping ground'. This has no parallels in Ludwigshafen. The contrast reflected the different futures residents in each town imagine. In Ludwigshafen, we found local branches of national environmental organisations operating; but the few activists critical of the chemical industry conceded that they faced a struggle to be heard in a town where trust in industry, and above all BASF, had been so strong.

### **Conclusions from comparing Grangemouth and Ludwigshafen**

- Safety concerns about the chemical or petrochemical industry among the public have been much more acute in Grangemouth than Ludwigshafen in recent years.
- However, these developments have been comparatively recent in Grangemouth: in the 1980s this was a booming town, confident in its strategic importance and future.
- A strong sense of confidence and trust in BASF and the chemical industry persists in Ludwigshafen.
- Regulators in Grangemouth were obliged to enter into dialogue with a sceptical public in a manner that had no parallel for their counterparts in Ludwigshafen, due partly to the predominant concerns of the community, but also due to the structures in place for public engagement.
- Public confidence in industry safety and government regulation has emerged as deeper in Ludwigshafen than would, we suspect, be likely anywhere in Britain. Yet Ludwigshafen may be unusual even in a German context, with its particularly long history of economic reliance on a single industry and a single company.

### **Questions arising from the comparison**

- Should this trust and confidence in Ludwigshafen be seen as contradicting those initial assumptions about greater environmental consciousness in Germany than Britain? Or as an expression of security in the knowledge that Germany is in the vanguard in Europe on environmental issues? Most in Ludwigshafen would opt for the latter.
- Does the activism witnessed in Grangemouth reflect a more general widening of environmental consciousness in Britain? Or is this activism less about environmental risk per se, and more a matter of economic and social concerns about jobs and the future, which draws on the language of risk and safety to enhance public claims to be taken seriously? Certainly the majority in Grangemouth would emphasise their social and economic problems.

## **Policy implications: main messages for local government, regulators, industry managers and non-governmental organisations (NGOs)**

Qualitative research like this does not lend itself easily to a set of lessons for policy makers – first, because it highlights what is particular rather than general; and, second, because it shows how deeply understandings of environmental risk are shaped by circumstance and context. Nevertheless, the following conclusions have relevance for those making and delivering policy in the field of industry and environmental risk:

- ***Transparency, trust and the long term***
  - (a) The link between transparency as a means and trust as an end is more complicated than is often supposed in policy debate. Public trust in institutions is a product of time; the promotion of transparency as a policy goal is not a substitute that produces instant results. Corporate transparency may create little trust, while a relative lack of transparency may not on its own weaken trust.
  - (b) Familiarity over time, a public belief in corporate responsiveness, willingness to acknowledge long-term local obligations, and economic security create foundations for trust on which transparency can build.
  
- ***Risk communication and its limitations***

Public judgements about local environmental risks were primarily shaped by factors other than official or scientific information and advice. ‘Risk communication’ strategies, with their emphasis on information provision, can therefore easily miss the point. Trust, familiarity, tolerance, confidence, loyalty and obligation provided the context of values and expectations in which risk judgements were generally made.
  
- ***Regulators and residents***

The recent past in Grangemouth has shown the importance of the relationship between regulatory bodies and residents in industrial towns, and the need to build upon existing dialogue. However, our study also shows that active engagement by the public with regulators may not of itself be a sign of dialogue working or consensus being achieved: it may equally be a sign of public outrage or unease in a crisis where other options are felt to be closed.
  
- ***EU policy framework and local context***

Despite the development of an EU policy framework for environmental regulation, a combination of the industrial culture of particular industries, places and regions, and social and political responses to local economic circumstances, will ensure that understandings of environmental risk are unlikely to become standardised across Europe. Local or regional policy responses must take account of these likely differences in order to respond appropriately.

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***Notes to the editor:***

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