

## **Lambert Review of Business-University collaboration: response by Pilkington plc**

### ***Need for the review***

Pilkington attaches the utmost importance to higher education and has strong relationships with selected Universities in the technical area. The quality of their research, and their ability to transfer technology, helps Pilkington achieve its technical objectives in areas of strategic business interest. Pilkington also uses these links for focussed recruitment.

The drivers for the review by Pilkington in 2003 are the twin threats of a reduction in public sector investment, and the reduction in the supply of high quality science & engineering graduates and post-graduates. There are also opportunities, especially the recruitment of postgraduates from outside the UK and the successful regional initiatives in the North West.

### ***Focus***

Pilkington welcomes the focus of the Lambert Review on the demand side. There is a failure in some Universities to understand the output required by business. Some Universities expect Pilkington to behave as a benefactor, rather than see themselves as service providers.

### **1. Benefits & best practice**

The benefits to Pilkington of collaboration with Universities are:

- (A) *Independent expert opinion*, which enables Pilkington to keep abreast of trends and attitudes in key markets, and developments in standards and legislation
- (B) *Access to test equipment*, which Pilkington cannot afford to own, and access to research results
- (C) *Recruitment*, of both technical specialists and general management
- (D) *Intellectual Property Rights*, resulting from Pilkington funded research

Pilkington currently funds collaboration with 10 Universities in the UK and their related spin-off companies in 3 ways:

- directly funded research
- Industrial CASE studentships
- collaborative research

Directly funded research is the most significant for technical breakthrough, and is covered by Non-Disclosure Agreements to prevent publication of results in academic journals.

Industrial CASE studentships are declining in number. The research results in better theoretical understanding and the main tangible benefit is the recruitment of talented postgraduates.

Collaborative research is useful at the pre-competitive stage. It can reduce the costs to Pilkington of early stage (often higher risk) investigations. European funded collaborations have also been a source of overseas postgraduate recruits.

### **2. Barriers**

There are unrealistic expectations on the part of the University business managers, who seek significant funding from industry but wish to retain Intellectual Property Rights to enable the university to spin-off companies. Experience shows that the effort required to exploit IPR is usually much greater than they expect, and the necessary skill set is in industry. The way forward lies in recognising the “give and take” nature of the industry/academic relationship and allocating the prime responsibility for exploitation to industry.

Information on what skills and expertise are actually available in a university is not always easy to find. Administrators with responsibility for organising broad-ranging interactions with companies can help. This could help to form a cluster on a regional basis, in partnership with the Regional Development Agency.

### **3. Attracting graduates & postgraduates**

Pilkington communicates its *postgraduate* recruitment needs to academic research partners, and advertises postgraduate posts through career services and the Internet. However, the lack of suitable students has led to CASE awards being stopped and the quantity of PhD applicants has fallen. Pilkington has successfully filled the gap by recruiting overseas nationals, who have gained their PhDs at Universities in the UK.

Pilkington meets its *graduate* recruitment needs through a mixture of direct graduate recruitment and structured undergraduate industrial placements. University industrial placement co-ordinators provide an excellent link with Pilkington engineers, which enable a dialogue and helps Pilkington to attract the best talent.

Postgraduate retention at Pilkington is excellent. Pilkington is committed to developing each individual. Science & engineering graduates have access to attractive career paths as technical experts, project managers, commercial and general managers.

### **4. Public finance**

There are over 20 schemes operated by the UK government to support innovation, though these are largely directed at SMEs. Public funds are awarded increasingly to Universities, not industry. Industrial CASE allocation by the EPSRC has dropped by 50%. The present financing arrangements could be made more effective by focussing on the research requirements of industry. Universities would submit bids against a clear specification from industry. Public funds would go to the best bid.

R&D tax credits send a positive signal to companies to maintain R&D expenditure. Business will demand more collaboration with Universities when the benefits of existing projects are delivered. An additional tax credit to reward directly funded research projects would enable Government to promote that part of the R&D budget selectively.