## THE IMPACT AWARDS

## **COLLABORATIVE IMPACT AWARD**

## Winner - University of Bath and Ford Motor Company



There has been a twenty-five year history of collaboration between the University of Bath and Ford Motor Company. This long-running partnership has resulted in engine improvements in everyday passenger cars that produce less than 100g/km of carbon dioxide which simply didn't exist three years ago.

For the past ten years, the partnership has focused on improving fuel economy and cutting carbon emissions by improving the understanding of the fundamental processes

within the engine. This research has fed directly into the design of new engine technologies at Ford which have been evaluated at Bath.

This collaboration has resulted in improvements that can be implemented across the range of engines within everyday passenger cars, such as the Focus, Fiesta and Ka. Ford now offers several A-rated models producing less than 100g/km of carbon dioxide, which has had a huge impact on national CO<sub>2</sub> emissions since these are some of the most popular vehicles on our roads. The work is helping Ford to cost-effectively meet new EU regulations which requires CO<sub>2</sub> emissions to fall steadily, with large financial penalties for manufacturers who cannot comply.

The collaboration has resulted in Ford leading the way in this field, it has also helped to improve the technical capability of the Ford Dunton Technical Centre as a European centre of excellence for powertrain R&D, hence protecting UK employment. Society will also benefit from the new technology as in addition to improvements in fuel consumption, vehicles that emit less than 100g/km of  $CO_2$  are exempt from vehicle tax.

