

## Environmental and social responsibility for the 21st Century

### Advanced Lead Acid Battery Consortium

Improving Performance, Reducing Environmental Impact

The Lead Industry is at the forefront of research into low emission, fuel efficient technology. This supports its commitment to working towards a sustainable future and earning recognition for its positive steps to improve all aspects of product and environmental performance.

The Advanced Lead Acid Battery Consortium (ALABC) is a major co-operative research effort between lead producers, battery manufacturers and the automotive industry. It was formed in 1992, initially to improve the capabilities of the lead acid (VRLA) battery for use in advanced electric vehicles.

Around 50 organisations are members and, as a pre-competitive research consortium, it offers each of them the opportunity to leverage their investment and participate in cutting-edge research for the benefit of them all.

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**The Consortium, managed by the International Lead Zinc Research Organization Inc., based in North Carolina, USA, is global and coordinates independent research scientists from many spheres of work in a variety of geographical regions.**

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In 2003 the ALABC widened its research focus and now pursues performance enhancements and scientific proof of ability to succeed, which will allow the lead acid battery to be successful in many applications.

It has spent more than US\$50 million over 16 years to improve the lifetime, performance and reliability of lead acid batteries, transforming their ability to fulfil the needs of ever-changing and more demanding markets. These include telecommunications and remote area power supply, automotive systems and hybrid electric vehicles.

Of all these areas, the most exciting is perhaps the hybrid electric vehicle which probably represents one of the major technologies of the future in motoring. With their potential for major improvements in fuel efficiency and associated reductions in carbon dioxide emissions, hybrid vehicles offer one of the much needed answers to climate change.

Lead acid batteries are much less expensive than the nickel-metal hydride type currently favoured by the hybrid vehicle industry due to the huge price differential between the metals (nickel can be up to 25 times more expensive than lead). With their performance boosted, lead acid batteries can provide an affordable and attractive alternative.



Find out more about ALABC at <http://www.alabc.org>