



**S**hoalhaven  
**I**ndustry &  
**B**usiness  
**A**ssociation Inc.

## **SHOALHAVEN R&D BACKGROUND**

For a regional area, the Shoalhaven has quite a strong base of manufacturing and other industry. These industries have developed in the Shoalhaven for a number of reasons:

### A. Resource related

Examples are Australian Cooperative Foods (Dairy Farmers) which is based on the significant local dairy herds; the many marine-related companies (yachts, surfing equipment and clothing, seafood suppliers, etc); mining equipment (initially supplying Illawarra coal mines); timber related companies – Sheldon Industrial Packaging, etc

### B. Defence related

Many companies have located in the Shoalhaven to supply the defence bases in the area.

### C. Incentive related

A number of local companies made the decision to move to the Shoalhaven under more active state/federal government intervention policies that provided significant financial incentives to move into regional areas.

### D. Lifestyle related

Some companies have located in this region for reasons related to lifestyle, land costs or similar. Many of these are in newer industrial sectors.

Companies in the Shoalhaven include:

- local operations of multinationals (e.g. Tyco Flow Control; Fosroc Chemfix, a Burmah Castrol subsidiary),
- subsidiaries of significant Australian companies (e.g. Manildra, Australian Paper, Dairy Farmers),
- small branches of overseas owned companies (e.g. Unicorn Cheese, owned by Snow Brand Dairies of Japan; Gates Rubber, owned by Gates International; Testa Water Purifiers, owned by Cuno, a US company)
- subsidiaries of smaller Australian companies (e.g., Minad owned by Probiotech);
- and a large number of locally owned and operated companies.

Employment levels vary from several hundred (e.g. Australian Paper, Manildra, Dairy Farmers) down to as few as one to five (e.g. Hot'n'Dry, Nell Fabrication, Brilliant Silk).

A significant number of Shoalhaven companies export to world markets. For most, the competitive edge (and the need to maintain it) drives a commitment to R&D. Companies in the region with world-class products developed through R&D include:

- Advanced Technology Watercraft (Solar Sailor) – solar-powered ferries and hybrid engine technology

- Trakloc – steel framing with a click lock system which obviates the need to use screws to fix frames in place
- Probiotech – development of chondroitin sulphate
- Rosebery Spray (King Cobra) – roof drilling equipment for use in underground coal mines
- Bashford International (Sydney Yachts) – top level competitive yachts
- Carbontech Spars – high quality masts for racing yachts
- Manildra – production of ethanol for use as a fuel additive
- Australian Paper – high quality printing papers
- Brilliant Silk – hand-made silk and woollen scarves and clothing
- Ocean & Earth – surfing clothing and accessories
- Air Affairs – towed targets and thermal sensors
- MacDonald Benchmark – software to be used in calculating likely costs of capital works typically undertaken by Councils
- Kaman Aerospace – helicopter assembly
- Nell Fabrication – light hovercraft design and construction
- Web Custom Lamination – fibreglass fairings for racing motorcycles
- Hot'n'Dry – dry suits for commercial/naval diving and recreational uses
- CSC – software for defence applications
- Partech Systems – *avionics*
- EWST – electronic warfare *systems*
- Fosroc Chemfix – mining chemicals for use in underground mines
- Nowra Chemicals – specialised cleaning products
- Newkem – waterproofing and concrete sealers

## **CURRENT R&D ACTIVITY IN THE SHOALHAVEN**

Generally speaking the larger companies in the Shoalhaven undertake continuing R&D as a matter of course. To maintain their competitive edge, these companies see that continuing expenditure on R&D is essential. Company turnover is generally sufficient to fund some level of R&D. Nevertheless, R&D expenditure would be higher if government support were more forthcoming.

However, for many smaller companies, the initial R&D effort has not been followed up with subsequent R&D expenditure and the company's product/service is rapidly dating. These companies are generally too small to have sufficient cashflow to fund further R&D.

## **R&D BENEFITS**

Whilst proximity to the marketplace will be a continuing competitive advantage for many local companies (e.g. building and construction; general engineering; repair and maintenance services; legal and accounting services; etc), for others the need to keep up with or ahead of national or international competitors will drive many companies to spend further on R&D.

## **R&D IMPEDIMENTS**

Shoalhaven firms that are subsidiaries or branches of international or national companies naturally have to convince senior management outside of the region of the need for or benefits to be gained from further R&D spending.

Smaller local firms generally have to fund R&D from cashflow and often such activities are undertaken "on the cheap". Trial and error is not an uncommon means used to refine existing products or develop new products.

A major impediment for the very small firms is lack of time. Many companies are so small that the same individuals are responsible for continuing operations, including production, marketing and administration. In such an environment, it is extremely difficult to set aside time and resources to undertake further product refinement or new product design.

### **R&D DEMONSTRATION EFFECTS**

As we have seen, R&D decisions in national and international companies in this region tend to be made elsewhere. Local management argue for improvements to production processes and for the development of new products (or product refinement) to suit the perceived requirements of customers. Exposure to competitive products at trade shows and input from existing customers are some of the drivers.

Smaller companies also are exposed to new ideas and products through international travel, competitions (e.g. yacht races) and feedback from existing customers.

### **R&D Assistance Measures**

In addition to the general taxation assistance measures for R&D, companies in this region have benefited from:

- Australian Technology Showcase – a scheme which has some non-financial benefits (participation in international trade missions, listing on an ATS website, etc) as well as a significant contribution towards the costs of internationalisation (participation in international trade shows; international patent costs; etc)
- Regional Business and Investment Tour – a program of the NSW Department of State and Regional Development that takes metropolitan merchant bankers, venture capitalist and investors to regional areas with a view of providing the much-needed capital to develop ideas and projects.
- Regional Assistance Program funding
- Dairy Regional Assistance Program funding

### **SUMMARY**

The Shoalhaven, with a population of less than 90,000, has developed a varied and competitive industrial base. The small size of the local market has meant that companies have naturally looked outside the region for customers. This has immediately placed local companies into a national or international marketplace. To maintain a competitive edge, local companies have needed to continually refine existing products and/or develop new ones.

Smaller companies often are successful on the basis of an original idea or invention, and only manage to maintain this position through “trial and error” style R&D, as this is all that they can afford.