



Over the past 18 months, green Thermal Energy Technologies has expanded its business from the original charter that it was established within, the design and production of Organic Rankine Cycle power generators, to the provision of solutions in thermal energy efficiencies across a wide range of industries. As power prices stabilised within Australia, the company found that many of its clients were requesting technologies to aid in the reduction of natural gas consumption. "We regularly find that when we visit clients' sites, we identify areas of thermal waste that they often don't see during their day-to day activities," says Managing Director Paul Keen. "The

founders of the business, with backgrounds from the global automotive industry, and the lean approaches that they derived from that industry can add real value to clients in identifying waste reduction methods." gTET has also been successful in expanding into numerous different overseas markets, including South Korea and the UK.

Priding itself in its expertise in a vast array of thermal-related technologies, gTET has become widely known for its application of innovative solutions, while most competitors may only push a singular technology upon all of their clients. Such solutions include

industrial heat pumps for high-temperature hot water. While relatively new to Australia, the technology is already highly common overseas. "As the power prices stabilise and the price of natural gas increases," says Paul, "and quite often, high-temperature heat pumps are a much more effective technology for producing hot water than natural gas boilers or water heaters." The company also provides heat transfer technologies for the recovery of exhaust gas waste, the improvement of energy efficiency in steam generation from boilers, and the capture of kinetic energy waste from systems such as industrial brakes and transmissions.

Energy efficiency, particularly thermal energy efficiency, is not an exclusive requirement for a single industry. As such, gTET's clients span a wide range of sectors. "We've recently found that the dairy and the food industries are becoming quite strong at the moment," says Mr Keen, "especially compared to declining manufacturing and mining sectors." gTET's ability to deliver both engineering services and turnkey solutions to clients has not only provided value to clients, but has also increased the company's market.

Paul points out that while environmental sustainability is an important strategy, it should be adopted as a corporate policy only on the provision that it offers commercial returns. "Our industry, particularly in the renewable sector, is littered with companies that can only survive



with the support of the government, and will collapse when that support ceases," he says. "I think as a corporate policy, it needs to be adopted, but the technologies that are adopted need to be ones that can provide real economic returns to the client. Our focus on innovation and supply chain means that the solutions that we can offer the clients will give commercial returns and fast paybacks on their investment."

When taking on new projects, gTET conducts a hazard and operability study early in the design process, in order to ensure that the technologies in the installations are safe and meet both the company's and the client's requirements. All installations go through a detailed OHS review as well, and gTET maintains its own internal policies in terms of workplace safety and regular training.



As a primarily technology-based company, research and development is a key element of gTET's business. "The R&D incentive program that the commonwealth government puts out has been very important for us," says Paul. "We've been able to utilise that to put back into the business and continue to develop our products for the last 3 years." gTET is also heavily involved with a number of institutions that provide assistance, facilities, and technologies to aid in the development of the company's own solutions. "It's a very important part of our business," says Mr Keen, "and how we're able to deliver innovative products to our clients."

gTET attracts business through its free initial service, wherein the company reviews the client's processes and works to locate areas of thermal waste and areas of opportunity. Many of such clients are referrals from previous successful projects, as well as groups carefully selected by gTET's agents in particular fields. "We find that working through an agent that's more familiar with a particular industry or field that may benefit from our technologies may be a better approach than us simply going in directly," says Paul.

As a preferred partner to AGL, gTET is routinely brought in by the group to offer energy footprint reduction opportunities to clients through the installation of equipment with lower energy requirements. Many companies that produce thermal waste will also seek gTET's assistance in their efforts to regiment such solutions.

The state of Australia's economic environment, as well as its dollar, is a factor that Paul feels will heavily affect the willingness of companies to invest in new technologies and capital in the year to come. Mr Keen also points to government and regulatory support for energy efficiency as another notable issue for many businesses. In order to limit its

dependence on the volatile Australian market, gTET intends to pursue further international opportunities in the near future.

Paul emphasises that for many, the decision to make the transition to energy efficient systems and practices is primarily a business strategy, and is a choice rarely made simply out of the desire to go green. "That's the important thing that anybody in this space needs to understand," he says, "most want real, tangible returns, and our company understands that. Our technologies and solutions provide fast returns, and give long-term revenues or cost reductions to their business."

