

AusEng Pty Ltd provides engineering and scientific services that enable government and industry to better understand, apply, and develop technology. Our team has extensive experience managing multidisciplinary projects, including multi-million-dollar initiatives for universities, CRCs, and industry partners. We are supported by strong global technical networks.

We service the following industries:

- Agriculture and food industries;
- Avionics;
- Building systems - fire and security;
- Curing concrete and plastics;
- Fire and rescue;
- Mining;
- Occupational health and safety;
- Oil and gas;
- Petrochemical and process industries;
- Power industry;
- Rail;
- Shipping;
- Tunnels – road and rail; and
- Warehousing and cold storage.

Our expertise

- Sensing and monitoring;
- Electrical Energy Storage Systems (Solar and Batteries);
- Demand response;
- Appliance efficiency;
- Vehicle charging infrastructure;
- Electric Vehicles; and
- Robotics.

We have led and participated in major research and development projects in Australia and the USA.

Capabilities

Our engineering and scientific services help governments and industry.

Our expertise includes:

- Sensors;
- Data acquisition systems;
- Software; and
- Data analysis.



Experience

We support effective technology use through technical analysis, communication, and economic assessments. Our work often involves mapping technology landscapes, stakeholder engagement, and quantifying economic and societal impacts. This informs technology development and integration within larger systems.

Forums & Standards Participation

We are engaged in many national and international standards processes, connecting us with hundreds of experts in industry and government.

Technology Development

We develop electronic and photonic systems with over 40 years of experience. Our current R&D focus includes the Sensor range of distributed temperature sensors (see Section 3 and www.AusEngLabs.com.au).

Technical reports

The following list illustrates the nature of our reports, which are often a mixture of technical and economic material.

- Benefits of IE4 Motors and Economically Sized Cables. The development of net benefit case and subsequent participation in the standards process to achieve an example of economic cables sizing in ASNZS3008 for the ICA;
- Energy Label Description for DEWHA;
- Measuring and Rating the Energy Efficiency of Pool Pumps: Part A: Laboratory Tests, Australian Greenhouse Office Equipment Energy Efficiency Program (EEEP), Industry-Government Working Group on Energy Efficiency of Swimming Pool Equipment;
- Motor Efficiency and Temperature Rise Information for AS5102 Technical Working group;
- Pool Plumbing Analysis for DEWHA;
- Possible Means of Measuring and Rating the Energy Efficiency of Pool Pumps, for the Australian Greenhouse Office and the Equipment Energy Efficiency Program (EEEP), Industry-Government Working-Group on Energy Efficiency of Swimming Pool Equipment;
- Pump Selection Criteria for DEWHA; and
- Transformer losses for ICA.

Who we have helped

Almost all of our activities combine our business and technical skills, hence our business and technical clients are mostly the same. Some of the more technical work was conducted for the International Copper Association and for the Federal government departments with responsibility for energy efficiency and demand response. For industry, our main contributions have been for company owners, board members and senior executives. We provide independent and objective information based publically, though direct contact with industry participants including those in our extensive global networks. For governments our main work has been on energy efficiency, car charging infrastructure and demand response.

Qualifications & Professional Memberships

Our team is highly experienced, with advanced qualifications across multiple disciplines. We hold two PhDs (from Sydney), one medical degree (MD Sydney), two Master's degrees (Sydney and Oxford), and various other degrees, including a law degree (Sydney). Peter holds a PhD, MEngSc, BAppSc (H1), and an electrical supervisor's certificate. He is a Professional Engineer and Fellow of the Institute of Engineers Australia (the highest level of membership, recognizing eminence in the engineering profession). Peter is also a Fellow of the Institute of Physics (AIP), acknowledging significant contributions to the field of physics. Additionally, he is a member of the IEEE (the world's largest professional engineering association), and a member of the NSW Association of Fire Investigators. Peter was awarded the Australian Institute of Physics prize for being the top student in his final year.

