



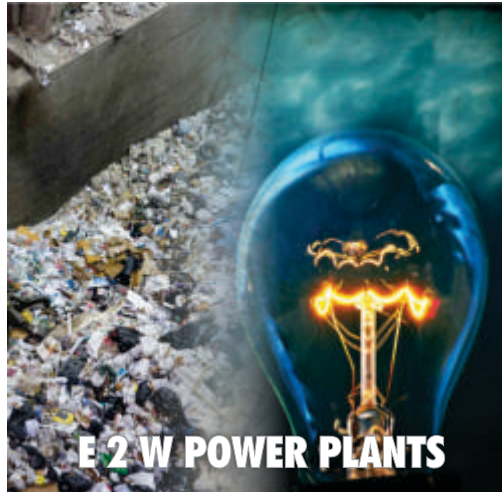
PUTTING WASTE TO WORK

AUSTRALIAN OWNED AND OPERATED

With a broad Australian industry experience, qualified and dedicated people and proven global technologies, Uneek Energy Solutions can help you turn waste from a liability to a practical and profitable energy source.



we provide **powerful** solutions



WASTE SOLUTIONS FOR: MUNICIPAL, INDUSTRIAL, MEDICAL, NON-RECYCLABLES (remnants of recycling processes)...PLUS

As proven project managers for Australian based installations, we have partnered with world leaders in W2E plant and technologies to provide Australian industry with solutions offering short payback on investment ratios and ongoing energy savings.



With increasing waste materials diverted to landfill and energy prices rising rapidly, there is an obvious solution to multiple problems.

turn waste into useable energy

Uneek Energy Solutions provides the technology, engineering and machinery to generate useable energy from most forms of waste materials, excess heat and steam created in the manufacturing processes. We also have the capability to provide the energy saving and re-generation solutions for a wide spectrum of Australian and regional industry including Power, Petrochemical, Manufacturing, Process and all other industries utilising combustion, or heat exchanging processes. Our locally based, specialist design team can directly access the latest European expertise to adapt to Australian project requirements. Our substantial manufacturing capabilities combined with global partnerships put Uneek Energy Solutions at the forefront of Australia's vital waste to energy generation future. Our key team members boast decades of international experience in managing engineering companies and waste to energy corporations to providing environmental mentoring. Uneek Energy Solutions (UES) is an Australian based advanced waste technology provider to process Municipal Solid Waste (MSW), Timber Waste, medical and Commercial & Industrial (C&I) waste streams.

THE MANAGEMENT TEAM



Les Sabo
MANAGING
DIRECTOR

Over 35 years experience in Mechanical Engineering and Manufacturing. Joined Uneek in 1989 as the Manufacturing Manager. Has been managing Uneek Bending and Rolling operations since 1996



Tony Fernando
DIRECTOR

Former Marine Engineer with over 35 years in combustion engineering. Managed engineering in two coal fired power stations & expertise in coal gasification technology. Also exposure to electricity 500/66 KV network transmission & distribution engineering & operations.

W2E POWER PLANTS

Uneek Energy offer advanced, environmentally friendly and sustainable energy supply technologies to Australian industry. Our services include, development, design, conception, planning and construction of turnkey 'waste to energy' plants that are capable of generating economical energy for in-house use and power credits back into the grid.



 **PN POWER PLANTS AG**
Dusseldorf

Our partner, PN Power Plants have been pioneering renewable energy since 1997 in the design and building of turnkey biomass and refuse-derived fuel power plants, as well as onshore and offshore wind farms.


PN Power Plants biomass co-generation plants are currently generating 896 million kWh per year in Europe with an investment volume of around 290 million euros.

WASTE PROCESSING

Uneek Energy offer Australian industry design, engineering and building of advanced technology, waste processing plants for a broad variety of municipal, industrial and medical waste conversion.

Ash, flue gas and heat which are subsequently converted to and redirected as energy.



 **ADVANCED GLOBAL**
INCINERATION TECHNOLOGY

Working with our global partners in advanced incineration technologies, we can supply a wide range of plant types and solutions to Australian industry,

Plant types include:

- ☐ WTE Vertical Combustion
- ☐ Slow Combustion with high moisture content fuel,
- ☐ Exit Gas Management

COMBUSTION MAXIMISATION

2D GAS TEMPERATURE MEASUREMENT IN THE COMBUSTION CHAMBER

Proven in over three hundred plants worldwide, AGAM allows operators to accurately monitor, control and optimize the efficiency in incineration plants, power plants, steelworks and refineries giving precise measurement of real gas temperature without radiation errors.



AGAM operates with the same high accuracy across the entire temperature range of the combustion process – from startup to full load operation.

Uneek Energy Solutions have partnered with Bonnenberg & Drescher to bring this remarkable technology to Australia
Constant precision from 0 to 2000 C

MERCURY & DIOXIN ABATEMENT

WET COKE ADSORBER

Wet coke is a proven, highly efficient filter for:

MERCURY, VOLATILE HEAVY METALS, DIOXIN, HCl, SO₂, and VOLATILE ORGANIC COMPOUNDS.

The system utilises low cost, non-hazardous wet coke as the filtration media to efficiently remove dangerous pollutants from incineration and flue emissions.



BENEFITS OF WET COKE ADSORPTION:

Used wet coke (low cost, non-hazardous filtration media)

Main effects: Adsorption, filtration, chemisorption, absorption

High precipitation

Simple operation

Low operating and maintenance costs

Simple, low cost adsorbants (HOK) disposal costs

DESIGN & MANUFACTURE

Uneek Bending Co provides state of the art engineering solutions in the design, manufacture and application of complex metal bending, rolling and welding. Our design, research and development engineers and production staff have years of experience in problem solving expertise to form and weld steel and other metal sections to meet customer requirements.



UNEK
BENDING

Highly experienced in producing complex components for boilers, heating & cooling coils, heat exchangers and other projects for power and general industry, Uneek Bending provides UES and its customers with an on-site, proven technical engineering and manufacturing resource.

The professional Uneek design team works with you to achieve the right solution for you and turn it into a practical, working project.

Uneek designers have vast experience in interpreting customer needs and creating the right solution to complex requirements and streamlining the whole process through to delivery.

UNEK
DESIGN



UNEK **UNEK** **UNEK** **UNEK**
BENDING ROLLING WELDING DESIGN

From the smallest component to complete design and project management of major projects, Uneek are committed to delivering on time and on budget.

- Professional 2D AutoCAD and 3D Solidworks
- Engineering expertise and excellence
- Complete project management

WHAT A WASTE!

OF POTENTIAL ENERGY



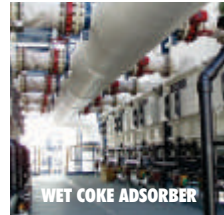
WASTE PROCESSING



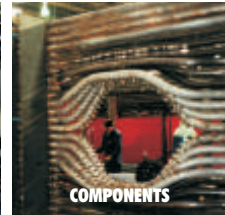
E 2 W POWER PLANTS



AGAM



WET COKE ADSORBER



COMPONENTS

UNEK[®]
ENERGY SOLUTIONS

Our locally based and internationally savvy management team and established manufacturing plant offer Australian industry a logical path to total project success.

we can provide **powerful** solutions





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