



The Environmental Group Limited

Annual General Meeting 2014

Chairman's Presentation

Board Composition

► David Cartney Non Executive Director

Chairman Elect

Fellow of the Australian Institute of Company Directors and member of the Institute of Directors London

15 years' experience as an independent and non-executive Chairman and Director

Past chairman of an electrical contracting and electrical engineering group with a \$180m turnover

Chartered Accountant, PHD in finance and a master's degree

► Sinan Boratav Executive Director

Master's degree in Engineering

General Manager Baltec IES

20 years' experience in the management of complex international engineering projects

► Ellis Richardson Executive Chairman

Chartered Engineer

30 years general management experience

Managing Director of large listed Australian engineering companies

Foundation Fellow of the Institute of company directors

Business Presentations Baltec



BALTEC IES

BALTEC
INLET &
EXHAUST
SYSTEMS

GAS TURBINE POWER PLANT PROJECTS

MANAGEMENT & OPERATIONS



CHAIRMAN

Ellis Richardson

FAICD, Chartered Engineer



GENERAL MANAGER

Sinan Boratav

M.Sc (Civil Engineer)



**OPERATIONS
MANAGER**

Quang Ly

B.Eng (Mech), B.Bus



PROJECT MANAGER

Dexter Hartono

B.Eng (Mech.Manuf)



**SENIOR PROJECT
MANAGER & QA**

Phil Dart

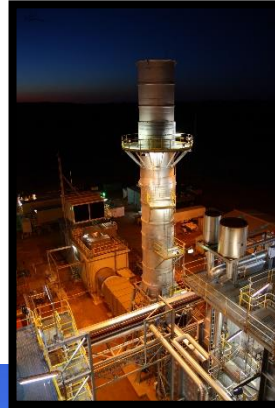
B.Eng (Elec & Comp)

BALTEC PRODUCTS

DIVERTER DAMPERS



BYPASS STACKS



INLET FILTER HOUSES



COMBINED CYCLE GAS TURBINE
POWER PLANT

GAS TURBINE POWER PLANTS



DIVERTER DAMPERS
DECADES OF KNOW-HOW

**THE ONLY MOVING EQUIPMENT
IN THE POWER PLANT
(APART FROM GAS TURBINE BLADES)**

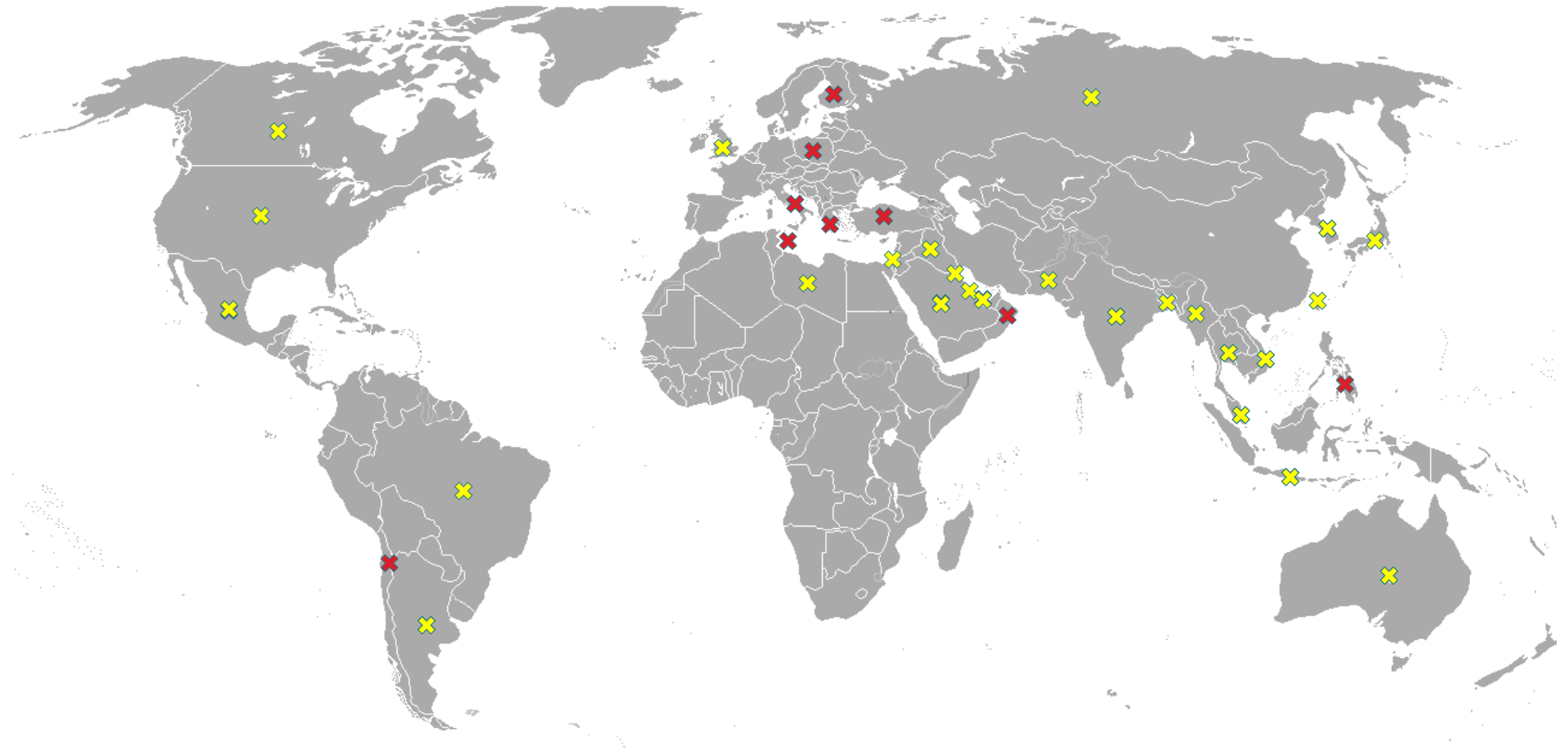
DIVERTER DAMPER SYSTEMS



DIVERTER DAMPERS
LIMITED NO OF REPUTABLE
COMPANIES

**5+ ENGINEERING DISCIPLINES
COMBINED IN ONE EQUIPMENT**

Offices, Agents & Fabricators

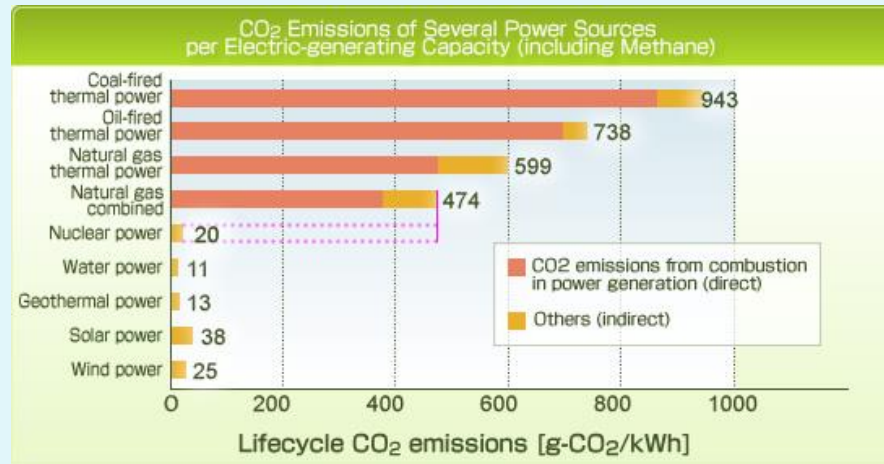


- ✕ Fabrication
- ✕ Offices & Agents

Why Gas Turbine Power Plants?

CLEAN & PROVEN ENERGY

- As GT machines get more powerful, natural gas becomes the popular fuel (in contrast, Coal & Nuclear Technologies are not being developed)
- Transition Energy Between Coal and Renewables
- ~3 Times less Carbon Emissions than Coal Thermal Power Plants



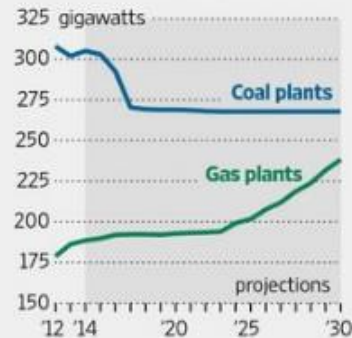
MARKET SIZE and TRENDS

WORLD POWER DEMAND (billion kw-hours)

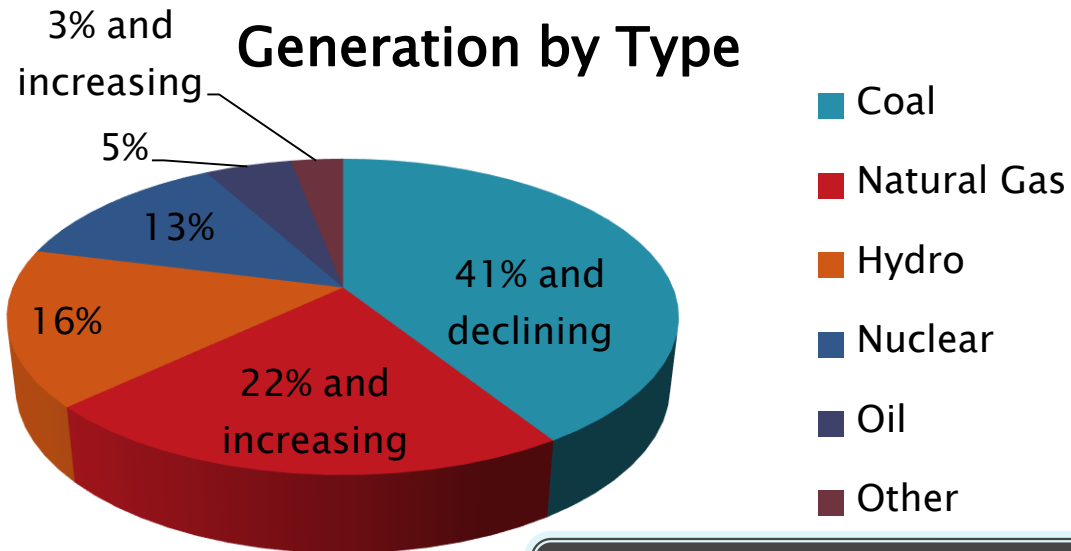
- 1990: 11,875 2020: 24,775
- Doubling of power needs since 1990s

Catching Up

Projected capacity for coal-fired versus gas-fired plants for generating electricity.



Source: Energy Department
The Wall Street Journal



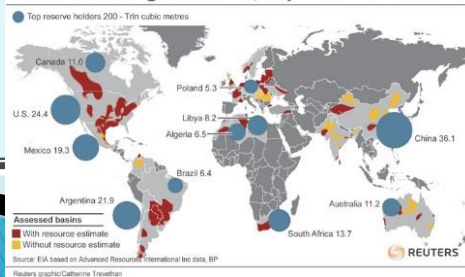
Source: Various Studies including
Forecast International Reports, CT USA

Why Gas Turbine Power Plants?

INCREASING RESERVES

- Proven reserves – 187,300,000,000,000 m³ [conventional NG]
- **Shale gas** – add 40% new resource worldwide
- Due to constant announcements of **shale gas recoverable** reserves, as well as drilling in Central Asia, South America + Africa and ongoing deep-water drilling, estimates are undergoing frequent updates, i.e. **continuously increasing**.
- **USA NG Production by Shale Gas:**
 - 1% in 2000
 - 20% in 2010
 - 46% in 2020

Global shale gas basins, top reserve holders



The New Global Energy Market
World's Shale Gas Map

Why Gas Turbine Power Plants?

Shale Gas: And the Hits Just Keep On Coming

- As of 2013, the US, Canada, and China are the only countries producing shale gas in commercial quantities.
- The Obama administration believes that increased shale gas development will help reduce greenhouse gas emissions
- Obama won a Supreme Court Ruling in June 2014 on his ability to impose Gas Turbine technology without Congress approval.



Natural gas, "is a useful bridge" to span "where we are right now and we hope to be" – where we've got entirely clean energy economies around the world.

Obama, June 2014

Why Natural Gas Turbines?



United States

- EPA wants 70 percent use of combined-cycle natural gas plants
 - The U.S. Environmental Protection Agency ([EPA](#)) says in its new carbon dioxide rule that it wants modern [natural gas](#) combined cycle (NGCC) plants used much more than they are now.
- USA – always (and still) the driver of Power Plant Generation



Why Gas Turbine Power Plants?

China & Russia

- Current GT Plants in China is only 0.9%
- China–Russia 30–years Gas Deal – \$400 billion
- China is the largest of any country for proven shale gas reserves



Why Gas Turbine Power Plants?

Next 3 decades

- **GT Industry in USA and MENA Countries**, is expected to grow strongly.
- **China is expected to become the leading GT region** as it aggressively promotes GT Plants to reduce dependence on coal power plants
- **Gas Turbines will benefit from increasingly stringent emissions legislation and roll out of emissions trading schemes.**



BALTEC IES



BALTEC
INLET &
EXHAUST
SYSTEMS

GAS TURBINE POWER PLANTS

Business Presentations TAPC

TAPC Business Overview



EGL AGM – 24th November 2014



Total Air Pollution Control

Overview

1. Who are we?
2. Our Technology and Services
3. Our International Partners
4. Our Locations

Quality • Innovation • Experience



Total Air Pollution Control

Who are we?

TAPC is Australia's most complete air pollution control company with a total range of services from the supply of new collection equipment to repairs and spare parts for existing equipment.

We pride ourselves on delivering the highest efficiency, most robust and most cost effective products to our customers. We have our own technology as well as many strategic partnerships worldwide that enable us to offer world's best practice in everything that we sell.

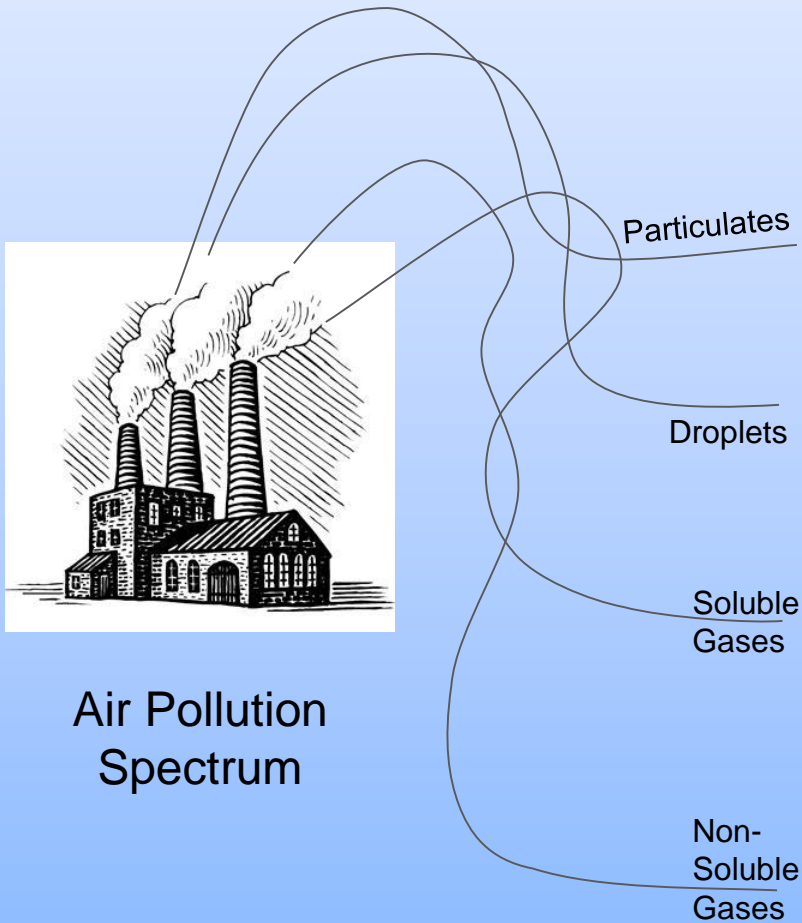
Who do we want to be?

Our mission is to become the leading supplier of air pollution control equipment and services.

Quality • Innovation • Experience



Technology –World's Best solutions



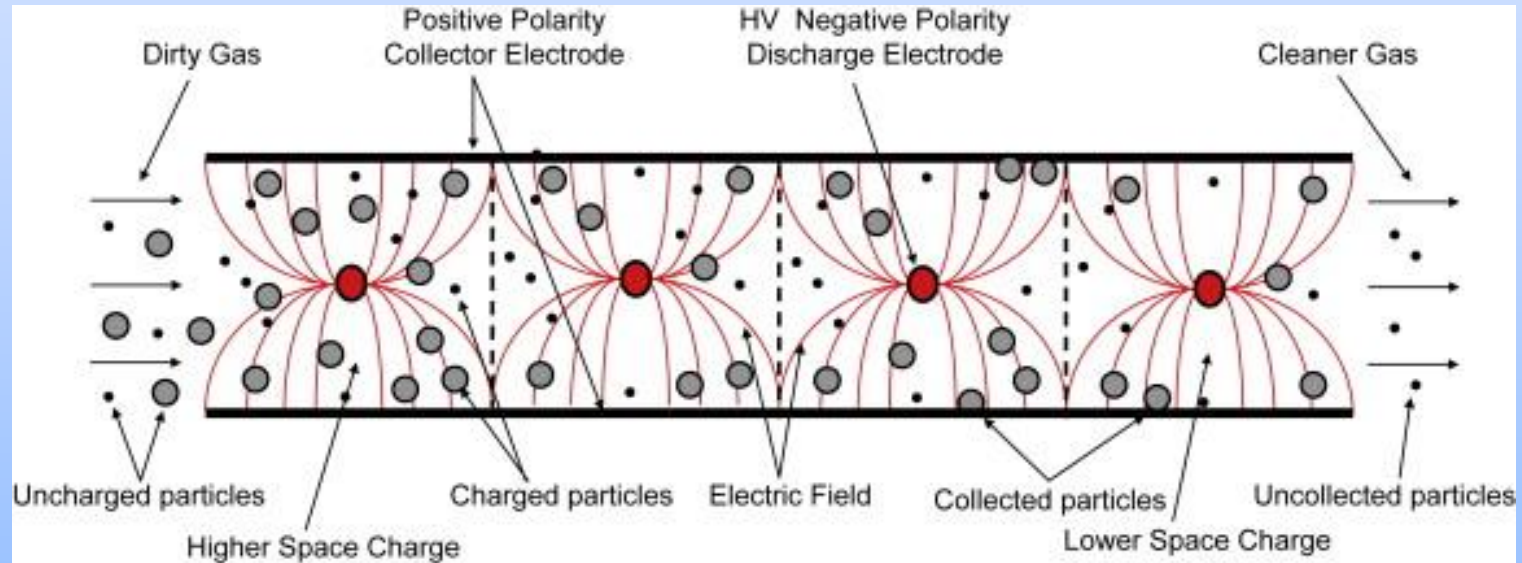
Air Pollution Spectrum

Technology	Provider
ESP	TAPC
Fabric Filter	TAPC PowerJet™ Range
Venturi Scrubber	TAPC v-SORB™
Wet ESP	TAPC
Mist Eliminator	Brink, Kimre
Chevron	Munters
Packed Tower	TAPC c-SORB™
Bio Scrubber	TAPC b-SORB™
Dynawave	TAPC/MECS
Dry Scrubber	TAPC
Activated Carbon	TAPC a-SORB™
Catalytic Destruction	TAPC/CRI
Thermal Oxidation	TAPC/Anguil
Non-Thermal Oxidation	TAPC



Capturing Fine Particulate

Electrostatic Precipitators



Electrostatic Precipitator Projects



BHP Billiton Olympic Dam



Visy Paper, NSW

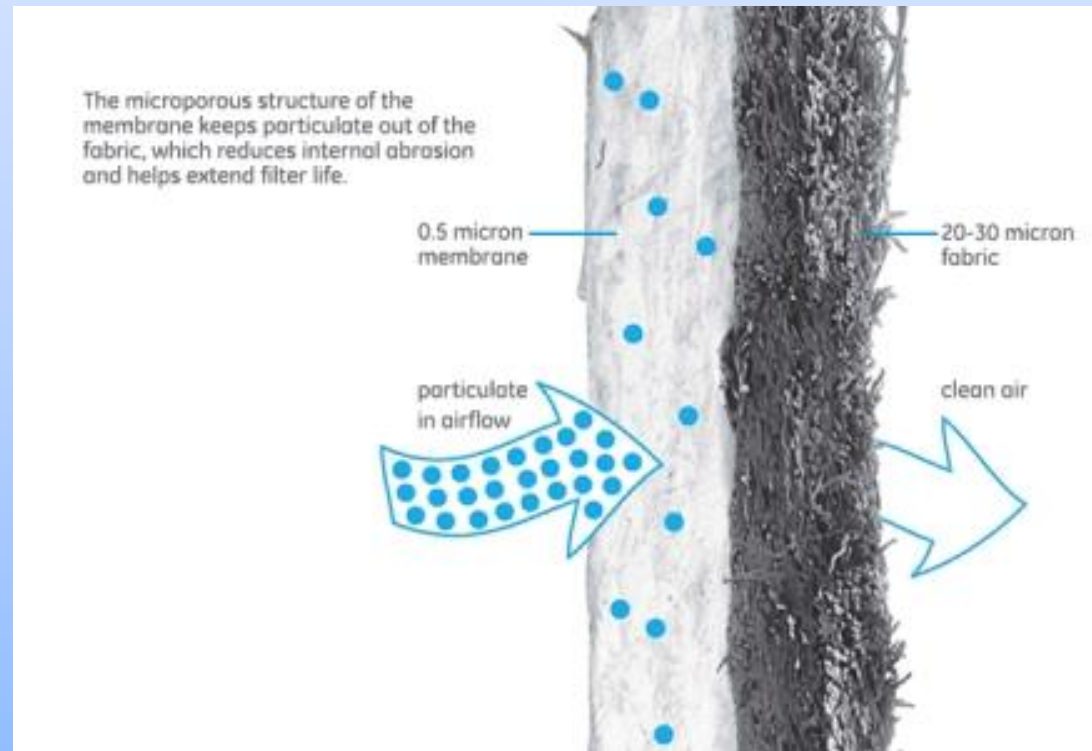
One Steel Whyalla

Glencore Mt. Isa, QLD



Capturing Fine Particulate

Fabric Filters



TAPC PowerJet™ Installations

Paint
Manufacturing



Wood Fired
Boiler



Steel Mill



Metallurgical
Ore
Processing



Grinding Plant
ventilation



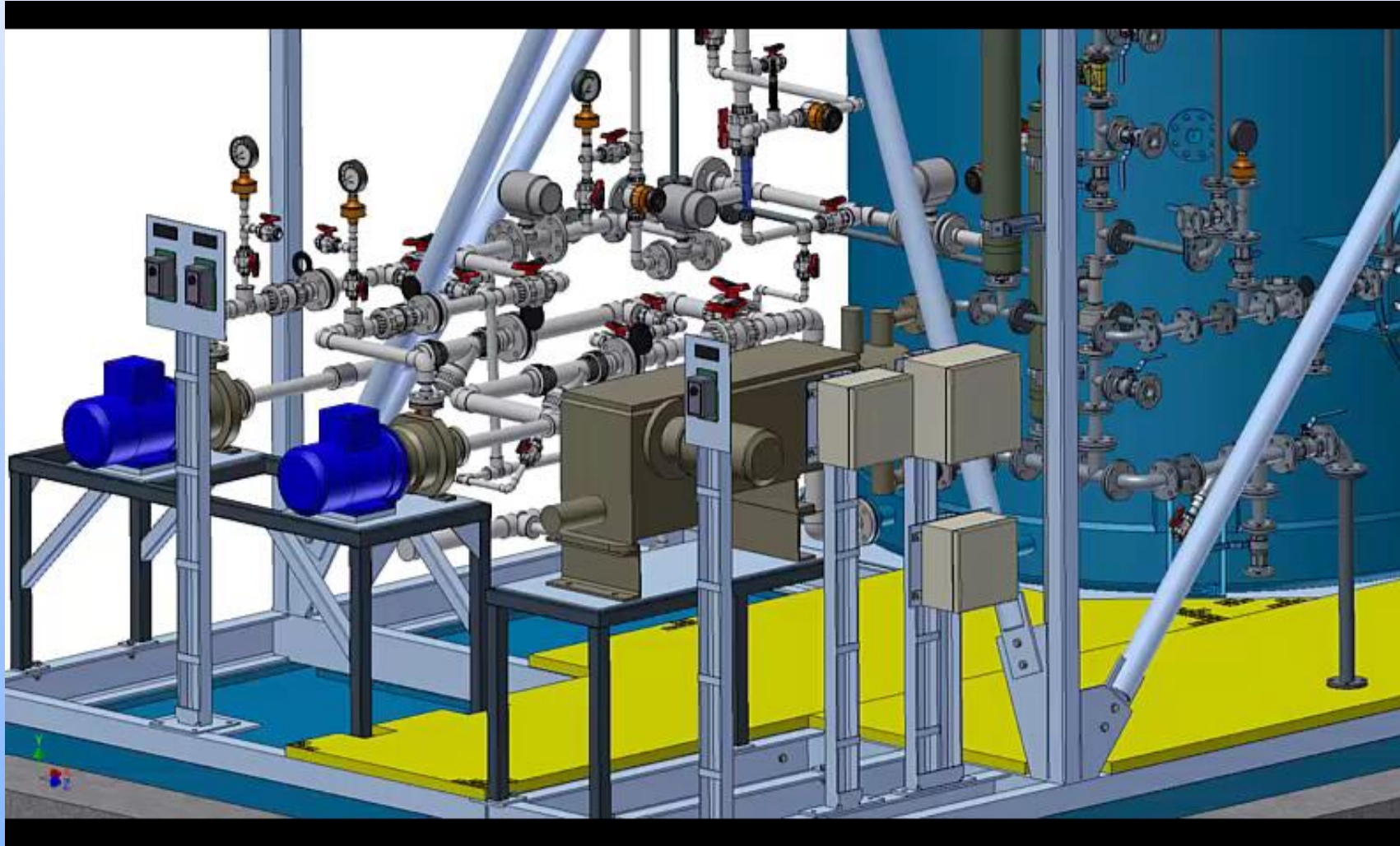
Chemical Scrubbing - Dynawave®



BlueScope Steel, Port Kembla
Gypsum Plant
Removing Sulfur Dioxide and
creating Gypsum

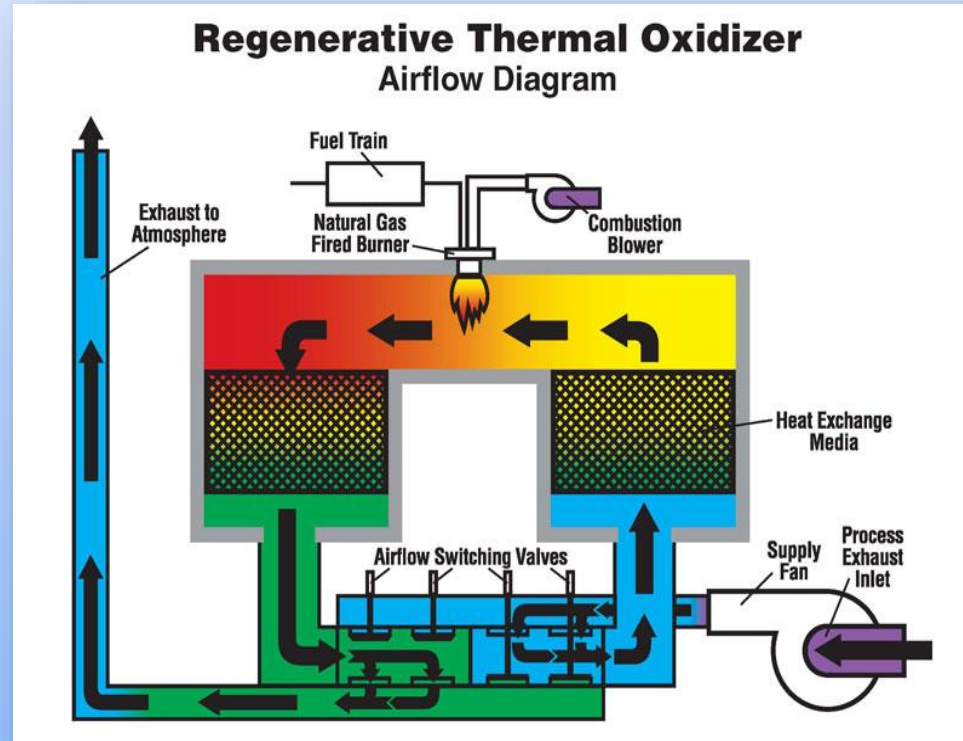


Chevron Hydrochloric Acid Scrubber



Regenerative Thermal Oxidiser (RTO) (Destruction)

ANGUIL



International Partnerships



Advanced fabric filter technology



Electrostatic Precipitator technology



Chemical Scrubber technology



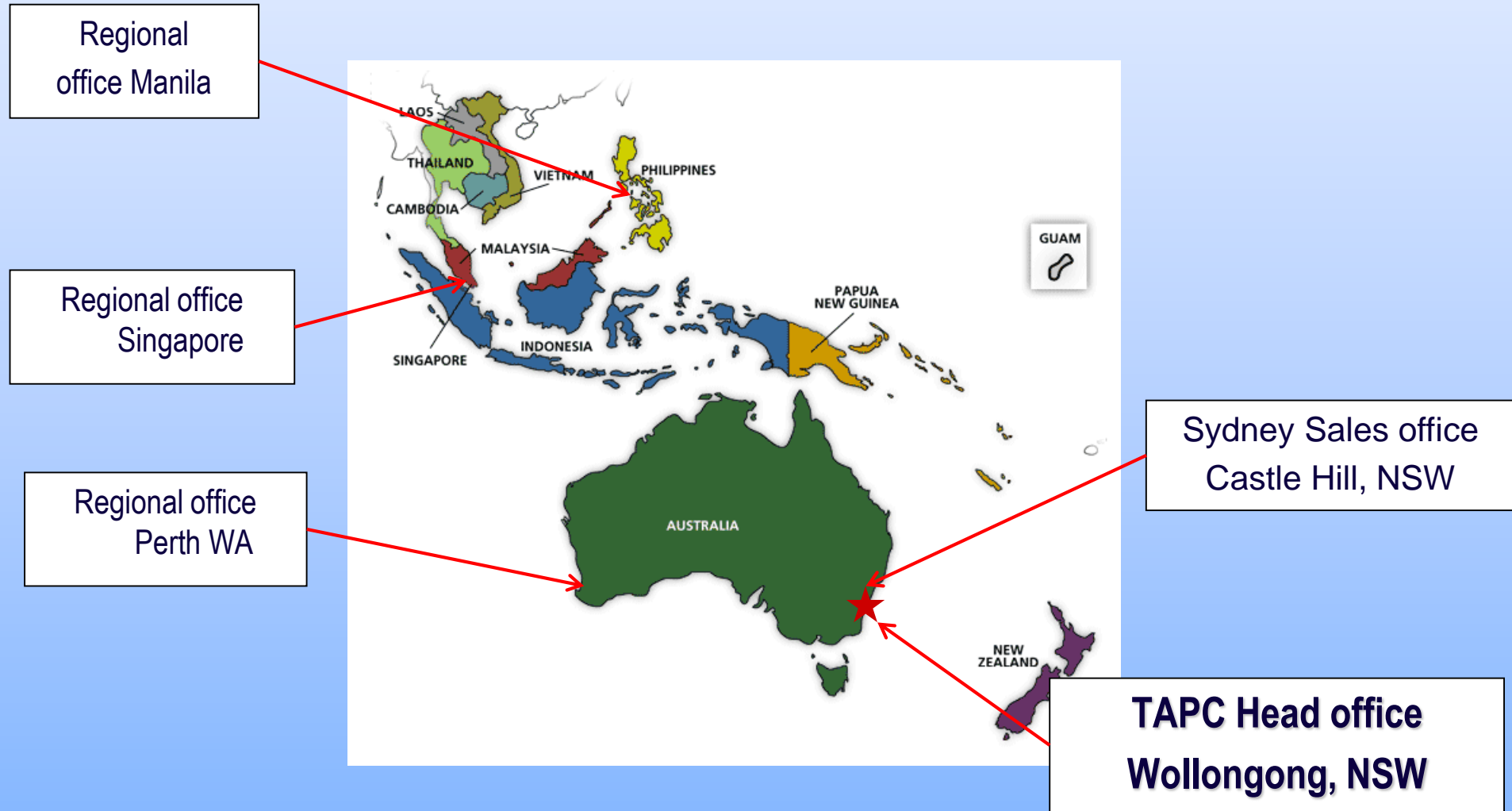
Dynawave™ & Kimre™ pad technology



Thermal Oxidation technologies

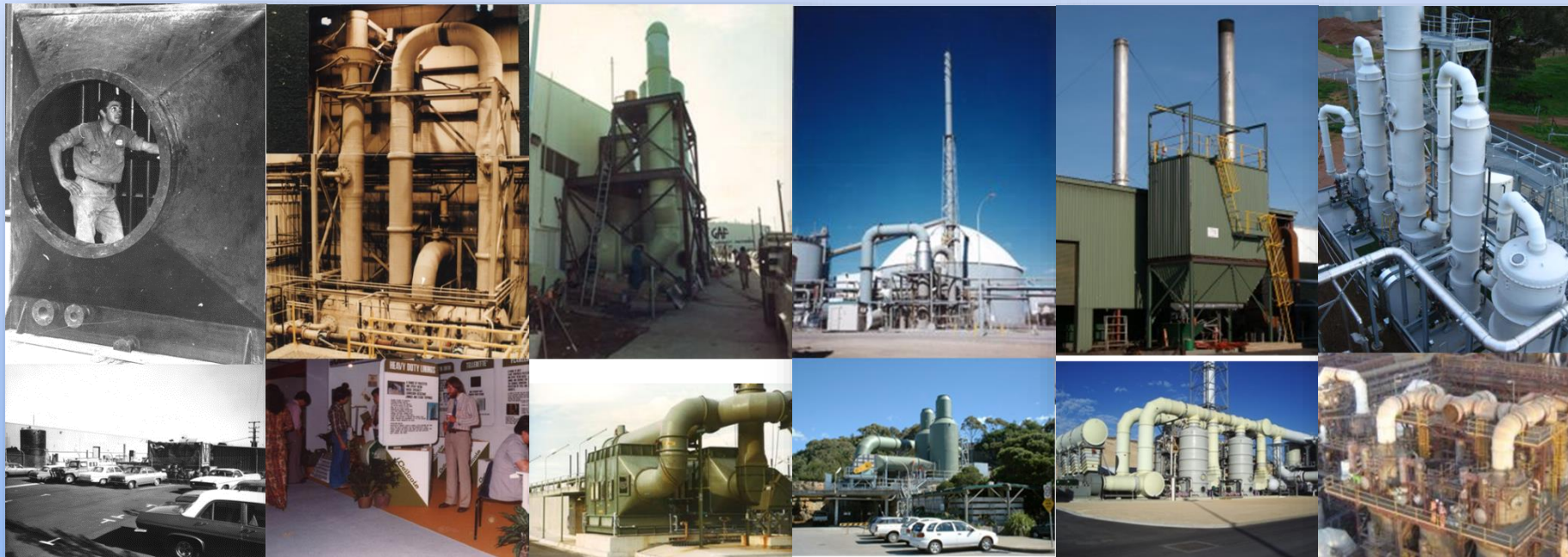


Regional Locations



The Air Pollution Control Experts

Quality • Innovation • Experience



1960s

1970s

1980s

1990s

2000s

Today

www.tapc.com.au



Chairman's Presentation (Cont)

Company Overview

► 2013/14 STATUS

► Corporate

Corporate costs too high for a small listed company.

Loss making company allowed to continue

Net costs and losses \$1.8M

► TAPC

A loss in the 12 months to June 2014

Has a number of difficult contract dating back to 2009

The overhead structure did not reflect the reduced volume of sales

The business relied on major project work and small maintenance contracts.

The market for project work had fallen away, due to the reduction in household and manufacturing use of electric power

► Baltec IES

Met Revenue and Profit budgets.

Cash constraints a major restriction on growth

Steady Growth

► 2014/15

► Corporate

Cost saving achieved through a reduction in the number of directors from 4 to 3

Reduced Directors fees and expenses will save almost \$150,000 per year

Increased efficiencies resulting in reduced staff and consultancy costs

Reduced interest rate costs by an average of 3% or \$60,000 per year

Elimination of a loss making company (MMS) saving \$700,000.

Capital raising of \$600,000 to provide additional working capital

Secured the support of Export Insurance Finance Corporation (Efic) resulting in a \$800,000 reduction in cash retentions required for contract bonds

A two day strategic planning program has been organised to provide a cohesive direction of the TAPC business

Additional meetings will be arranged for the combined group operations.

► Gas & Vapour

Now a separate division

Organisation restructure will ensure a return to profitability when difficult contracts are finalised

The market for projects is extremely competitive but spare parts and maintenance work is profitable

The division has returned to profitability but is not expected to achieve the required return on equity this year

Steady Growth

► 2014/15

► ESP's

Now a separate division

Gary Hardie, the previous CEO will retire in December but continue part time and be responsible for assisting local and export development utilising the existing TAPC and Baltec network of agencies. The board would like to thank Gary for his outstanding contribution to EGL. For many years TAPC was the major profit centre.

The organisation restructure now reflects the reduced market volume.

A small lift in volumes will result in bottom line benefits due to the lower cost base.

The division has returned to profitability and there are encouraging signs that with the reduced overhead structure this will continue into next year.

► Baltec IES

Contracts won and in the pipeline will ensure sales targets for FY 15 will be similar to, or exceed revenue achieved in 2014.

There will be a softer first 6 months than expected due to a customer required delayed start-up of a significant contract.

In the event that expected sales are achieved then the 12 months budgeted profit for FY15 will be in line with or exceed the previous years profit.

Future

► OPERATIONAL PROGRESS

We are pleased to update shareholders on recent positive operational events.

EGL continued to make steady progress during the last 5 months and has signed significant new contracts valued in excess of \$13.5 million in the CAMENA region (Central Asia, Middle East and North Africa). There is a healthy pipeline of expected sales particularly in Asia and the Middle East.

There were additional opportunities available to EGL during this period and the company is now working with a variety of funding sources to increase its ability to take further contracts and grow EGL. The continued support from Efic (www.efic.gov.au), will enable the company to be better placed to enjoy these contracts in the future.

► Acquisitions

A number of small bolt on acquisitions are now being contemplated

Larger acquisitions will be considered when cash flow and share value improves

► Outlook

Your directors expect a small profit for the group in this financial year.



The Environmental Group Limited