



Investor Presentation

October 2019



About Carbonxt (CG1.ASX)

Carbonxt produces patented, non-brominated, Activated Carbons that are used to eliminate mercury and other toxic pollutants from industrial flue gas and waste water streams.

Our US-based manufacturing plants produce both powdered and pelletised products which are used by customers predominantly operating coal-fired power stations, cement plants and other industrial processes.

Emission reductions are mandated by the Environmental Protection Agency (EPA) and the US power industry has invested billions of dollars installing equipment to mitigate the release of mercury.

Unlike industry peers, our products are non-brominated, which means they do not corrode capital equipment. Industry users are becoming increasingly concerned about bromination, both as a corrosive and pollutant.

We are a solutions-based company, developing customised products for specific industrial needs.

Our products are single-use creating reoccurring revenue with contracts typically several years in duration.



Advanced Carbon Products

Carbonxt listed on the ASX in January 2018 raising A\$10.0 million through the issue of shares at 70 cents and valuing the Company at \$51.1m.

In November 2018 the company raised a further \$6.1m in equity via a placement and a 1 for 4 entitlement offer at 40 cents per share.

189%
Revenue Growth in FY19



Company Summary

	\$0.30
Shares on issue (m)*	88.80
Market Cap (A\$m)	26.64
Debt (A\$m)	5.50
Enterprise Value (A\$m)	32.14
Options/Warrants (m)**	14.14

* Inc 3.6m share in Escrow until Feb 2020
 ** Various average strike \$0.58



Board of Directors

Name	Position	Shares
Matthew Driscoll	Chairman	0.42
Warren Murphy ¹	MD	0.25
David Mazyck ²	Director	0.27

¹ Warren Murphy holds 1,500,000 exercisable at \$0.50
² David Mazyck holds 1,000,000 exercisable at \$0.50

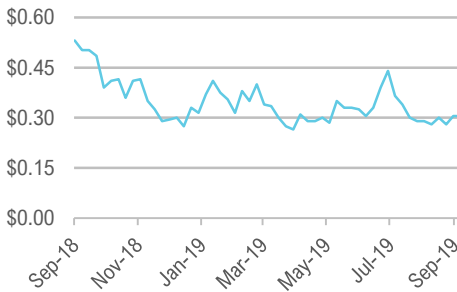


Share Register

Werft Pty Ltd (Lang Walker)	11.02%
Walker Group	6.19%
Beville Investments	5.87%
Super Quinn Pty Ltd	3.38%
Washington H Soul Pattinson	3.37%



Price Chart



Our 2 key products

POWDERED ACTIVATED CARBON

- Produced from Black Birch manufacturing facility with capacity to produce 10,000 tonnes per annum.
- Powdered Activated Carbons, or PACS, are the type of product used by coal-fired power plants to achieve emissions compliance. They are injected into the plant's flue gas, where they can then absorb mercury.
- In FY19 we sold 4,940 tons to 8 customers at an average price of A\$1,830 to generate A\$9.04m revenue, up 47% on FY18.
- Over the course of FY19 we enjoyed improving economics of scale and manufacturing efficiencies and expect future gross margins in the range of is 28-38%.




PELLETISED ACTIVATED CARBON

- Produced from manufacturing facilities at Arden Hills and Gainesville we have capacity to produce 7,000 tonnes per annum.
- Our AC pelleted products have a wide range of industrial applications and compete mostly against imported products which suffer from supply side challenges and more recently tariffs. Most imported products come from China.
- In FY19 we sold to two customers generating A\$9.28m revenue, up 4,937% on FY18.
- Over the course of FY19 we started producing from our own facilities and expect future gross margins in the range of is 25-40%.



FY19 Results Summary

- Revenues of A\$18.3m, up 189% on FY18.
- Pellet sales grew from A\$0.2m in FY18 to A\$9.3m in FY19, making it the largest revenue division within the group.
- Underlying EBITDA loss of A\$5.1m, with significantly better operating performance in the second half.
 - 1H underlying EBITDA: A\$-4.2m
 - 2H underlying EBITDA: A\$-0.9m
- Improvement in gross margin from 6.7% in 1H19 to 30.4% in 2H19.
- Operating Cash Flow positive for two months in 2H19.
- Entry into new market verticals such as Industrial Pellets and Water.
- Registration of four new patents in FY19, taking the patent portfolio to a total of nine.
- The company was able to raise both equity and debt capital in FY19, confirming that capital markets are supportive of the growth strategy.



> 90%
Mercury
Reduction

9
Granted &
Pending
Patents

29%
increase in
number of
customers



Profit & Loss

As at 30 June (A\$M)	2H18	1H19	2H19	Change (pcp)
Powdered	3.1	5.4	3.7	17%
Pellets	0.2	3.3	6.0	3389%
Group Revenue	3.3	8.7	9.7	191%
Cost of Goods Sold	-2.7	-8.1	-6.7	152%
Gross Margin \$	0.7	0.6	2.9	347%
Gross Margin %	20%	7%	30%	54%
Operating Costs	-4.6	-4.9	-3.8	-17%
EBITDA	-3.9	-4.3	-0.9	-78%
EBITDA (Underlying)	-2.7	-4.2	-0.9	-67%
D&A	-0.1	-0.3	-0.4	185%
Net Interest	-0.1	-0.3	-0.6	338%
Tax	0.0	0.0	0.0	-
NPAT	-4.2	-4.9	-1.8	-57%
One-off costs	1.2	0.1	-0.0	-
NPAT (Underlying)	-3.0	-4.8	-1.8	-39%

FY19 Revenues grew 189% YoY to A\$18.3m.

- Powdered Activated Carbon grew 47% to A\$9.0m
- 2H19 revenues in powdered segment reflect seasonality of demand.
- Pellets grew 4,937% to A\$9.3m

FY19 Gross margins fell from 24% in FY18 to 19% in FY19

- Impacted by start-up manufacturing as we moved to own facilities in 1H19
- Now rectified, 2H19 gross margin 30%

A tale of two halves, underlying EBITDA loss fell 5% to A-\$5.1m in FY19.

- 1H19 EBITDA loss A\$-4.2m
- 2H19 EBITDA loss A\$-0.9m, trending towards profitability.

After a period optimisation, Carbonxt is now approaching a period of sustained profitability. Gross margins are improving, costs are contained, and our products are in demand.

Opportunities exist for growth within both divisions, but most notably within Pellets. As the only North American manufacturer, we continue to penetrate this market segment and are assessing additional use cases for our product. Increasing tariffs on imported products are assisting this entry. Powdered is expected to improve on the 2H19 performance.

Cashflow

As at 30 June (A\$M)

FY18

FY19

Cashflow from Operations

Receipts from Customers 6.1 17.4

Payments to Suppliers and Employees -13.0 -23.2

Net Interest Cost 0.0 -0.5

Net Operating Cashflows -6.9 -6.3

Cashflow from Investing

Payments for Plant and Equipment -0.5 -4.1

Payments for Intellectual Property -0.1 -0.3

Net Investing Cashflows -0.6 -4.4

Cashflow from Financing

Proceeds from Issue of Shares 13.2 6.1

Proceeds from Loan Payable 0.0 5.4

Repayment of Convertible Notes 0.0 -2.5

Other -1.3 -1.3

Net Financing Cashflows 11.9 7.7

Movement in Cash 4.4 -3.0

Opening Balance 0.5 5.2

Effects of exchange rate changes 0.3 0.2

Closing Balance 5.2 2.4

We reached our target of being cashflow breakeven in June 2019. Positive cashflow is expected in 2H20, however, working capital associated with the ramp up of material new orders may impact 1H20.

Cash receipts from customers increased 186%, inline with the growth in revenues.

The payment of Black Birch lease liabilities were a key cash outflow, and a major reason for the rise in broader operating expenses.

Experienced a rise in Investing Outflows due to the expansion and optimisation of production facilities. Capex requirements for incremental capacity expected to be less material.

Both equity and debt was raised throughout FY19, with capital markets open and supportive of the strategy.

Balance Sheet

As at 30 June (A\$M)	FY18	FY19
Cash	5.2	2.4
Receivables	0.8	1.7
Inventories and Other	1.1	2.7
Total Current Assets	7.1	6.8
Property Plant and Equipment	2.1	10.6
Intangibles	1.5	1.7
Total Non-Current Assets	3.6	12.3
TOTAL ASSETS	10.7	19.1
Borrowings	0.1	1.0
Trade Payables and Other Liabilities	1.8	3.6
Total Current Liabilities	1.9	4.7
Borrowings	2.3	7.5
Other Liabilities	2.0	2.0
Total Non-Current Liabilities	4.3	9.5
TOTAL LIABILITIES	6.2	14.2
NET ASSETS	4.5	5.0

FY19 saw significant PP&E investment made in the Arden Hills and Black Birch facilities.

Net borrowing capacity was increased by A\$3m as the company repaid the convertible bond and established a new A\$5.5m Syndicated Facility led by PURE Asset Management and Skye Alba.

The Company remains funded to execute on the pipeline of opportunities continuing to present in the US market.

Revenue Growth

We have enjoyed consistent growth over the last two years with group revenues increasing by 383% from FY17 through to FY19.

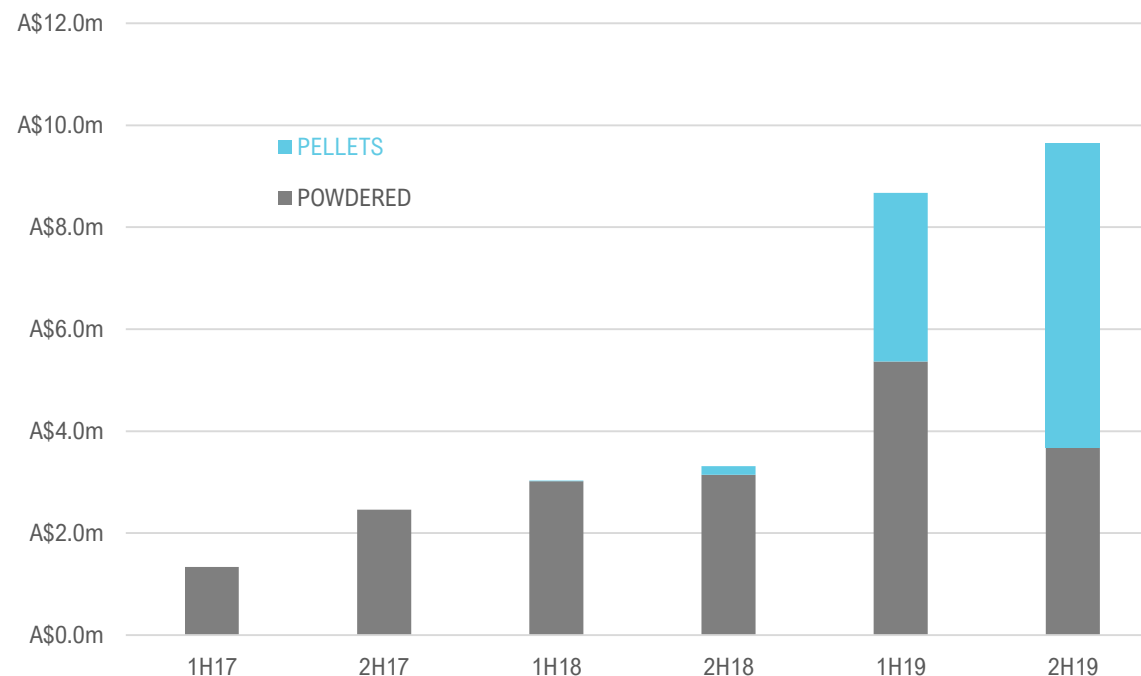
Demand for both our products has been strong and we are increasingly diversifying our customer base.

Management made a conscious decision to focus on the Pellet opportunity in FY19, driven by:

- i) Shorter sales cycle.
- ii) Diversification away from large Power Station customers.
- iii) Broadening of the addressable market.
- iv) Longer-term margin opportunity.

While the decision proved successful, revenues from Powdered Activated Carbon fell in 2H19 as management's focus shifted. We expect this division to return to growth going forward.

Half Yearly Revenues



4,937%
growth in
FY19*

54%
CAGR
FY17-19

* Pellet CAGR cannot be determined due to zero base

What is driving our demand?

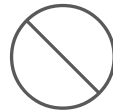


Regulatory Requirements

The US Mercury and Air Toxics Standards (MATS) are federal standards requiring power plants to limit emissions of mercury and other toxic gases.

Effluent Limitation Guidelines are US standards that are being considered to limit mercury and bromide discharge through wastewater.

Minamata Convention is a global treaty agreed in 2013 by 128 countries to limit mercury emission.



Non Brominated

Our patented technology is at least as effective as peers but does not contain bromine or other halogens which competitors use to enhance the sorbent qualities of their Activated Carbon products.

Utilities are becoming increasingly concerned about corrosion from these additives, and we see an increasing number of RFPs specify non-brominated solutions.



Pellets

Activated Carbon Pellets (ACP) are created by extruding activated carbon into cylindrical shaped pellets, and are ideal for vapour and liquid phase industrial applications.

The internal capabilities at Carbonxt allow pellets to be tailored to meet various customer requirements, and developed for the capture of specific chemicals. This customisation differentiates Carbonxt from competitors and is rapidly broadening the addressable market for industrial applications.



Price

Our products have lower input costs and require less material for the same mercury abatement. The price for our PAC products is usually competitive, although not always the cheapest.

As the only US domestic producer of Activated Carbon Pellets we can offer this product below the price of our overseas competitors.



Location & Service

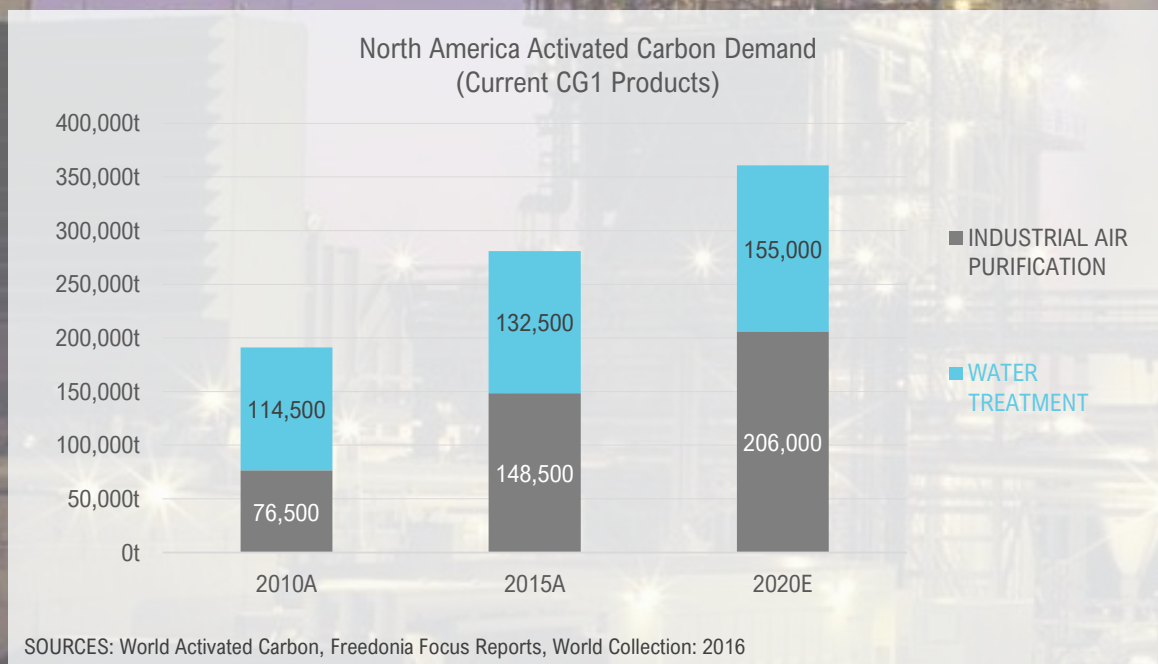
We have built our facilities near to our key customers, which has reduced supply chain issues and allowed us to offer better service and support.

Dr David Mazyck is a world-leading authority on Activated Carbon and a thought leader in the industry.

In May 2019 Activated Carbon from China had 25% tariffs imposed, an increase from the previous 10% levied in September 2018.

Addressable Market & Pricing

With a limited number of operating producers, much data within the market is proprietary in nature. As a result, it is difficult to accurately determine the size of the addressable markets in which Carbonxt operates.



25-29 Nov 2019

Dates of the next meeting for the Parties to the Minamata Convention on Mercury, to which activated carbon is a prime beneficiary.

Approx US\$150 - 200m

ADA Carbon Solutions' estimate of the size of the North American MATS Powdered Activated Carbon Market.

14.7%

The CAGR of the Global Activated Carbon Market according to industry expert MRC from US\$4.1bn to US\$14.2bn by 2026

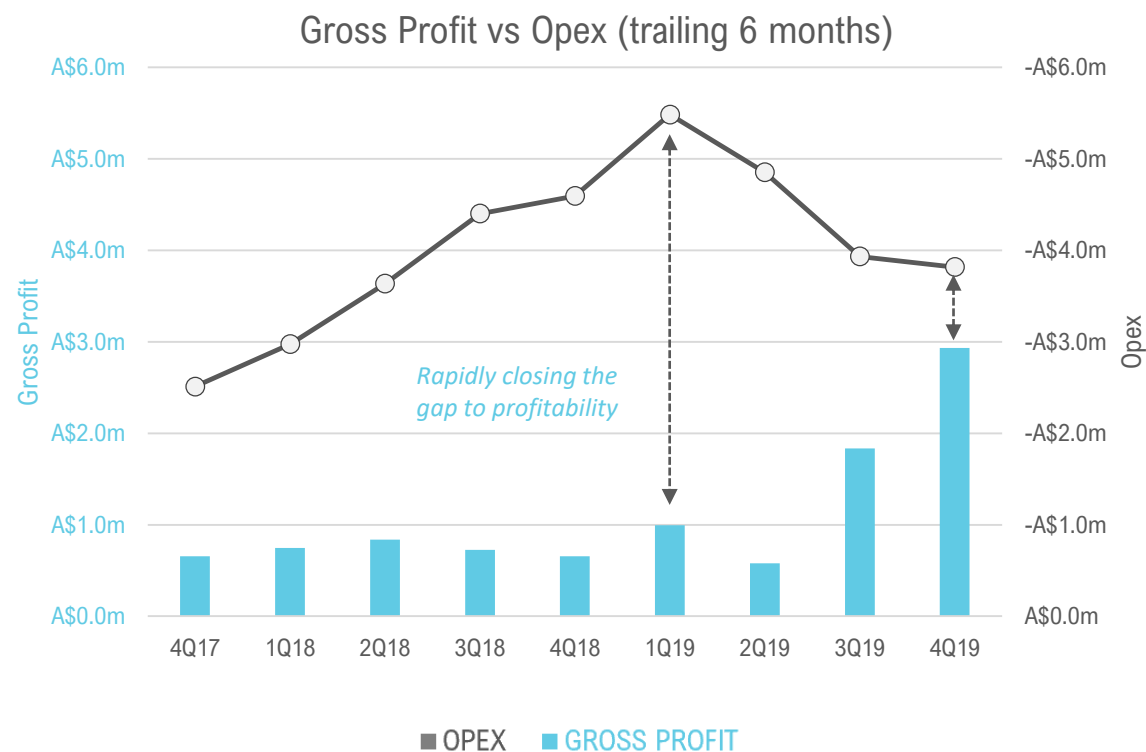
Pellets

While the broader AC market is forecast to grow strongly, pelletized AC is expected to expand faster than legacy powdered products

5% – 15%

The amount by which Cabot Corporation plans to increase prices across all activated carbon products from 1st October 2019

Our path to profitability



After years of Research and Development, we are now reaching a meaningful level of commercialisation within our product range.

Based on the pipeline of work available, we expect to reach sustainable profitability in 2H20.

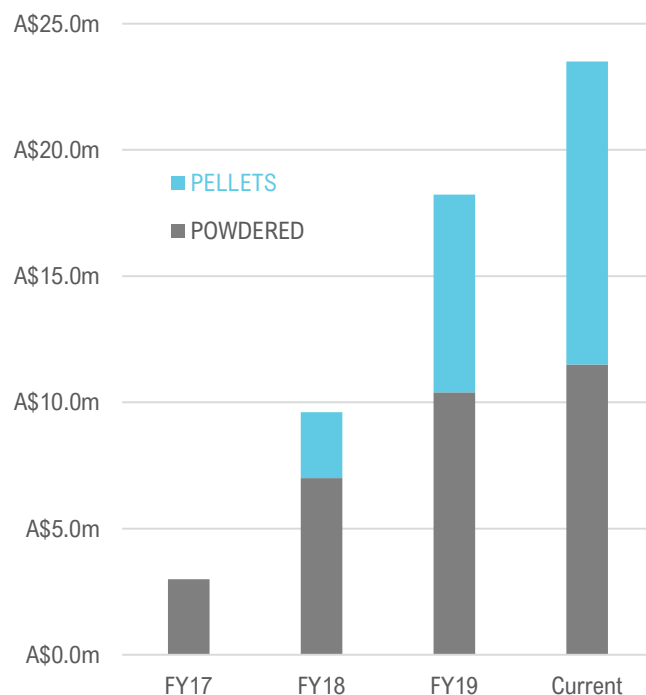
While the number of trials and discussions with potential customers continue to grow, the potential deal sizes are also larger than legacy contracts.

The cost base was improved materially in 2H19, providing strong operating leverage as future revenues grow.

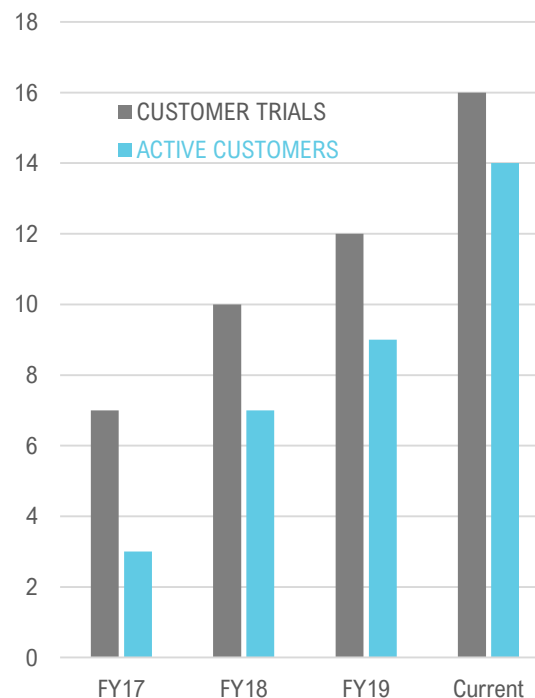
Gross margins are expected to improve as the product mix shifts towards higher margin Pellet opportunities.

We are about to close a material contract and expect to reach sustainable profitability in FY20.

Forward Order Book



Customers & Trials



90%

Our total order book of contracted revenue grew 90% to \$20.0m in FY19 , and currently stands at A\$23.5m

16

We have 16 active trials with prospective customers. A large proportion of new trials relate to Pellet opportunities, where historical conversion rates are in excess of 50%

A\$20m

The total estimated value of orders being trialled or negotiated is A\$20m

US production facilities

Current estimates suggest our production facilities will be operating at between 45% and 90% utilisation throughout 2020.

Should demand exceed currently capacity in the years ahead it would require approximately US\$6m to double the capacity of our Black Birch and Arden Hills facilities.

Pellets - Arden Hills and Gainesville: 7,000 tonnes p/a nameplate capacity

Utilisation: Pellet facilities to operate at a minimum of 80% utilisation in FY20

Powdered - Black Birch: 10,000 tons p/a nameplate capacity

Utilisation: Black Birch to operate between 45% and 75% utilisation in FY20

OUR LOCATIONS



The Pellet Opportunity

Carbonxt is the only North American manufacturer of Pellet solutions, in what is a fast growing and largely underpenetrated market.

Pellet revenues grew from \$0.2m in FY to \$9.3m in FY19. Inbound enquiries continue to increase as awareness of our Pellet capabilities grows.

While Pellet orders to date have revolved around fulfilling requirements for power stations, we now see opportunities across a range of industrial applications. This is evidenced by the recently won contract within the Filtration sector.

The development of new solutions continues to expand our addressable market into industries not previously serviced by Carbonxt.

Target industries



Benefits



- Shorter sales cycle.
- Higher margin opportunity longer term.
- Broadens and diversifies the customer base across multiple industries.
- Significantly increases the company's addressable market.

Outlook statement



After reaching periods of cash flow profitability in 2H19, Carbonxt expects to deliver its maiden year of operating cash flow positivity in FY20. Based on current work-in-hand and pipeline of opportunities in discussion, we expect to deliver FY20 revenue in the range of A\$24 – A\$29m. This represents organic growth of 31% - 58% YoY.

NEXT HORIZON OPPORTUNITIES

- **New Pellet Verticals** – subject to minor chemistry modifications, our Pellet range can be adapted to serve industries far beyond our target market. Management is analysing further opportunities to which the technology can be applied.
- **WetJect™** is a patented process that targets mercury elimination through the injection of a customised sorbent directly into wet flue gas desulfurization (WFGD) systems - installed in 60% of power stations. This technology is more efficient for mercury removal compared to the standard air phase and is cost-effective to install. Initial sales are expected in FY20.
- **International Sales** – despite being signatories to the Minamata Convention most countries have yet to implement legislation to limit the release of atmospheric mercury. Freedonia estimates global demand for Activated Carbon is growing at a 9.1% CAGR.



Board & Senior Management

MANAGING DIRECTOR

Warren Murphy

Warren was Co-Head of the Australian Infrastructure & Project Finance Group and Head of Energy at Babcock & Brown. Warren led the development of Babcock & Brown's energy sector capability in Australia and New Zealand, including the founding of Infigen Energy. He was also a director of the ASX listed Alinta Limited and Sydney Gas Limited, and development of over 2,000MW of Greenfields power stations and the acquisition of over 3,000MW of generation.

INDEPENDENT CHAIRMAN

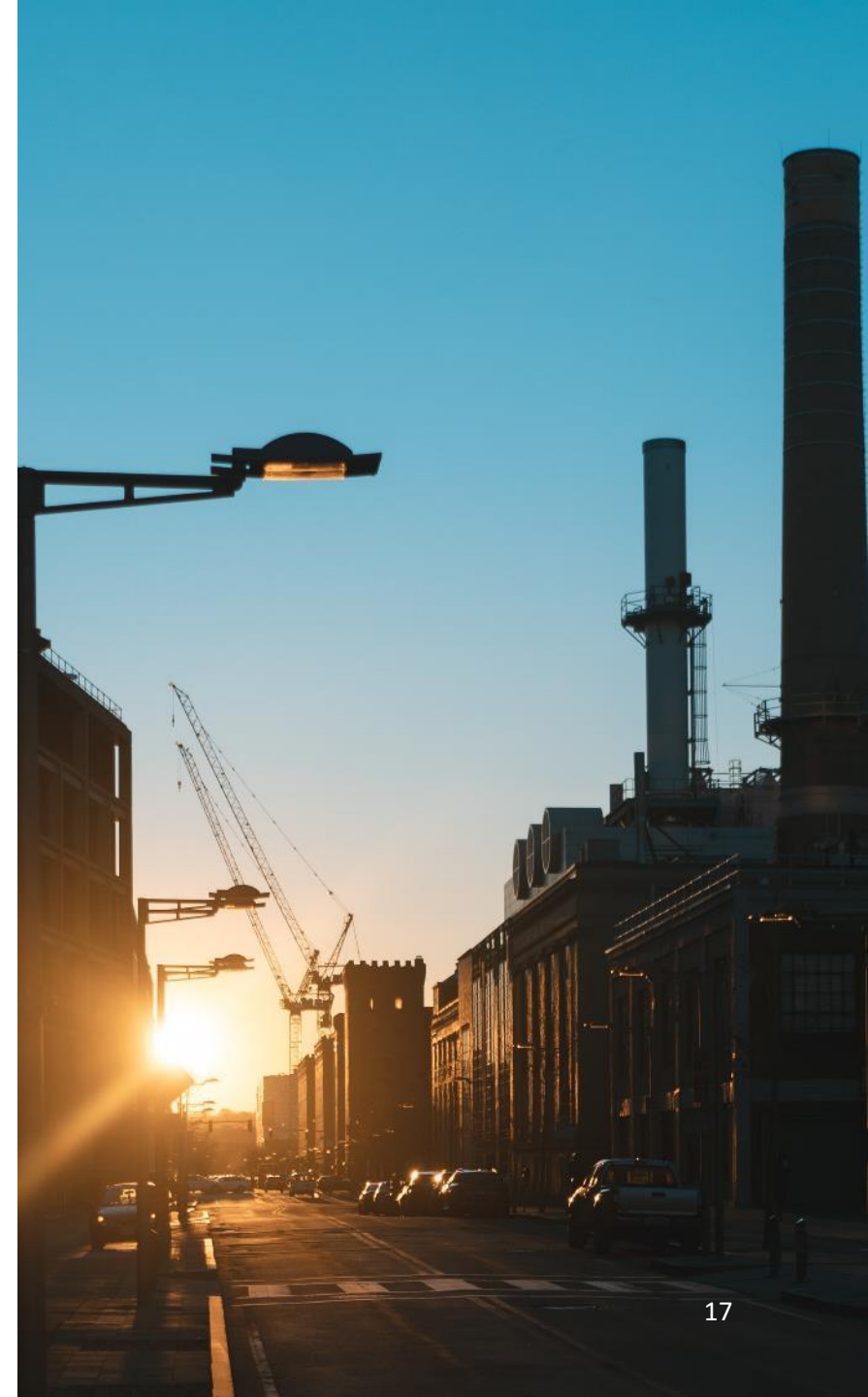
Matthew Driscoll

Matthew has significant experience across several industries, including online technologies, financial services, fintech, property and resources. He has more than 30 years' experience in capital markets and the financial services industry and is an accomplished company director in roles across listed and private companies. He has significant experience in international business growth, mergers and acquisitions, equity and debt raisings and building strategic alliances, and remains committed to ethical, commercial and consumer-based outcomes. Matthew is NED Energy Technologies Limited (EGY), NED Blina Minerals (BDI), NED BuyMyPlace.com.au (BMP), NED Smoke Alarms Holdings.

EXECUTIVE DIRECTOR

Dr. David Mazyck

David is a world-leading expert on activated carbon (AC) and its applications including mercury capture. He has developed AC products for the major multinationals. Dr. Mazyck is the former Chairman of the Activated Carbon Standards Committee for the American Waterworks Association and has developed products for NASA. He is a member of the World Coal Association and an appointee to the United Nations.



CONTACT

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Thank you