PITT STREET RESEARCH

Environmental Clean Technologies ASX:ECT

COMPANY UPDATE · Industrials

Actually destroying the new asbestos

ASX: ECT · Sector: Industrials · 23 July 2026 Share Price **A$0.105**

Environmental Clean Technologies (ASX:ECT) is building a PFAS destruction platform that can destroy PFAS while meeting tightening regulatory expectations.

Destroying PFAS chemicals, instead of just removing or treating them

ECT has a Rapid Electrothermal Mineralisation (REM) system, derived from Flash Joule Heating (FJH) that is for both in-situ and ex-situ destruction of PFAS, having licensed the system from the university group that developed FJH. PFAS chemicals are often described as the 'new asbestos' as their environmental persistence and health consequences are on par with asbestos. The investment case for ECT is that it has developed a platform that truly destroys PFAS with laboratory testing demonstrating up to 99.98% removal of PFOA instead of just treating, shifting it or just giving the impression PFAS has disappeared. It does so by breaking the carbon-fluorine bond, one of the strongest bonds in organic chemistry, and converting the liberated fluorine into inert calcium fluoride — a result that is verified by closing a full fluorine mass balance.

ECT took its technology from the lab to a reality 18x stronger

In mid-June, ECT announced that its pilot REM system was complete. It will be field tested in the second half of 2026 but it is designed to deliver 18 times higher power output than the laboratory prototype, have a far higher kHz and volt capacity (170 kHz and 2,200 volts vs the earlier 70 kHz and 500-volt configuration), while occupying approximately 50% less volume and weighing approximately 75% less than the lab-scale build. ECT is now targeting its first in-field demonstration across soil and granular activated carbon (GAC) applications in the second half of 2026, and we would expect a successful demonstration to lead to commercial interest.

We see upside to $0.26-0.33 per share

We value ECT at A$0.26 to A$0.33 per share, which hinges on validation of the REM pilot on PFAS samples in H2 CY2026. Success then aligns ECT with the PFAS remediation peer universe (base, A$95m / A$0.26); strong execution plus EPA traction supports a Metallium-style re-rate (bull, A$120m / A$0.33).

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Key Metrics

Market cap. (A$m)	**37.68**
Shares outstanding (m)	**358.8**
Shares fully diluted (m)	**499.4**
Market cap ful. dil. (A$m)	**52.44**
Free float	**97%**
52-week high / low (A$)	**0.20 / 0.03**
Avg. 12M daily volume ('000)	**1,589.4**

Share Price (A$ l.h.s.) and Volume (k, r.h.s.)



Source: Refinitiv Eikon, Pitt Street Research

Disclosure: Pitt Street Research directors own shares in ECT.

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The investment case for ECT

1. **PFAS chemicals are on par with asbestos as an environmental problem.** For many decades, PFAS chemicals have been used in industrial processes to the point where up to 57,000 sites in the US alone are suspected to be PFAS contaminated. In recent years, the problems caused by PFAS have intensified rapidly. PFAS chemicals are linked to health concerns including elevated cancer risk, immune system disruption and endocrine effects. Moreover, they can persist in the environment for up to 1,000 years. The US and Australia alone are deploying over US$10bn annually; but most solutions today are effectively 'band-aid' solutions.

REM removes >99% of various PFAS from contaminated soils, with 96–99.9% of fluorine accounted for as inorganic fluoride on spent GAC.

2. **ECT's REM technology actually destroys PFAS** rather than just capturing them, moving them away or reducing toxicity. Laboratory testing has shown removal of over 99% of various PFAS from contaminated soils, with greater than 96% defluorination; and, on Granular Activated Carbon (GAC) and ion-exchange resins, destruction of PFOA and PFOS with 96–99.9% of fluorine accounted for as inorganic fluoride. Few technologies can prove complete mineralisation.

3. **ECT's REM technology aligns with what regulators are asking for**. Regulators increasingly require not only that PFAS is destroyed, but that destruction can be proven, and that the process itself carries no adverse environmental impact. The company recently made a submission of its public performance data to the US EPA right in the middle of a once-in-four-year consultation window.

ECT has made a submission to the EPA on the REM pathway to destroying PFAS.

4. **ECT's technology is at a pivotal point**. Having been proven in the lab, the company has developed a pilot REM system and is aiming for in-field trials. As we will address in the report, the pilot system is higher-frequency and higher-power, designed to reduce field remediation time and make field deployment more realistic. While the pilot system is indeed a larger machine, the former points are more important because they improve soil conductivity and reduce treatment time. Over the next 6 months, investors can expect testing results, and (if successful) we would not be surprised to see the first commercial agreements to follow.

5. **ECT has a clear commercial pathway**. The company will target GAC, a lower-risk first commercial wedge because spent carbon is already concentrated, conductive and linked to water treatment systems looking for end-of-life disposal options. Larger opportunities (soil and in situ treatment) will be addressed over time. Moreover, the company's planned licensing model will support a capital-light, high-margin profile.

6. **ECT remains undervalued relative to its potential**. We value ECT at $0.26 per share in our base case and $0.33 per share in our bull case. See page 15 for our valuation methodology.

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Solving PFAS with REM: A unique kind of FJH

ECT's technology is known as Rapid Electrothermal Mineralisation (REM). This is a remediation process using Flash Joule Heating (FJH) to destroy PFAS. FJH is a technology developed at Rice University that applies a high-voltage, high-power electrical pulse directly into a material, generating temperatures in excess of 1,000 degrees Celsius within seconds to minutes depending on scale (James Tour and that same team supported Metallium during its early proof-of-concept phase). ECT, however, has licensed REM for environmental remediation.

ECT's REM technology is a remediation process using Flash Joule Heating (FJH) to destroy PFAS.

Figure 1: ECT's initial lab testing of FJH



Source: Company

REM is a tailored type of FJH where carefully tuned electrical parameters are used to permanently break the exceptionally strong carbon-fluorine bonds in PFAS. In doing this, the contamination is broken down and mineralised into inert non-toxic calcium fluoride. This technology was validated at Rice University, specifically in treating PFAS-saturated granular activated carbon (GAC) after PFAS capture in water treatment. Testing results depicted removal of up to 99.98% of PFOA, one of the most common PFAS compounds, together with greater than 96% defluorination efficiency. Separately, REM has been evaluated on PFAS-contaminated media supplied by the US Army Corps of Engineers, rather than on laboratory-spiked material alone.

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PFAS needs to be destroyed, and this is just what REM does

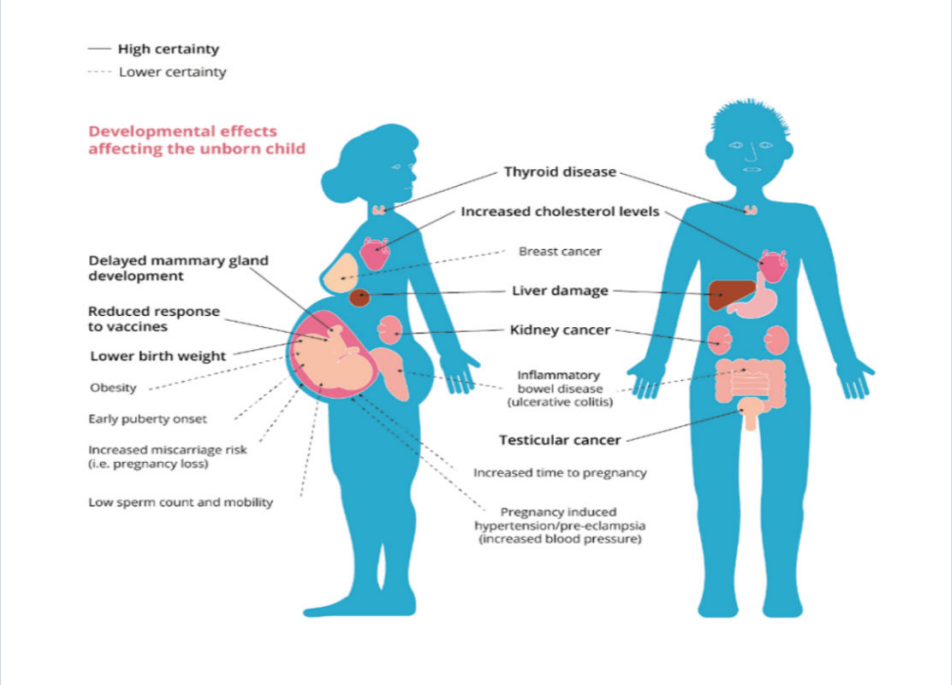
Per- and polyfluoroalkyl substances (PFAS) are a family of up to 15,000 synthetic compounds first developed commercially in the 1940s by companies including 3M and DuPont. The carbon-fluorine bond that makes PFAS industrially useful, valued for its thermal resistance, oil and water repellence, and durability, is also one of the strongest organic chemical bonds known. Left in the environment, PFAS can persist for up to 1,000 years – hence they are commonly called 'forever chemicals'. A growing body of research links PFAS exposure to several health effects such as elevated cancer risk, immune system disruption, and endocrine effects (Figure 2).

There are up to 15,000 documented variations of PFAS, that can persist in the environment for up to 1000 years.

Given all of the above, it would not be unreasonable to state that the PFAS problem is on par with asbestos. This is why governments and regulators in the United States, Australia, and Europe are accelerating both remediation requirements and funding programs.

The PFAS problem is on par with asbestos.

Figure 2: The effects of PFAS chemicals



Source: United States Environmental Protection Agency

Removing PFAS is a costly exercise

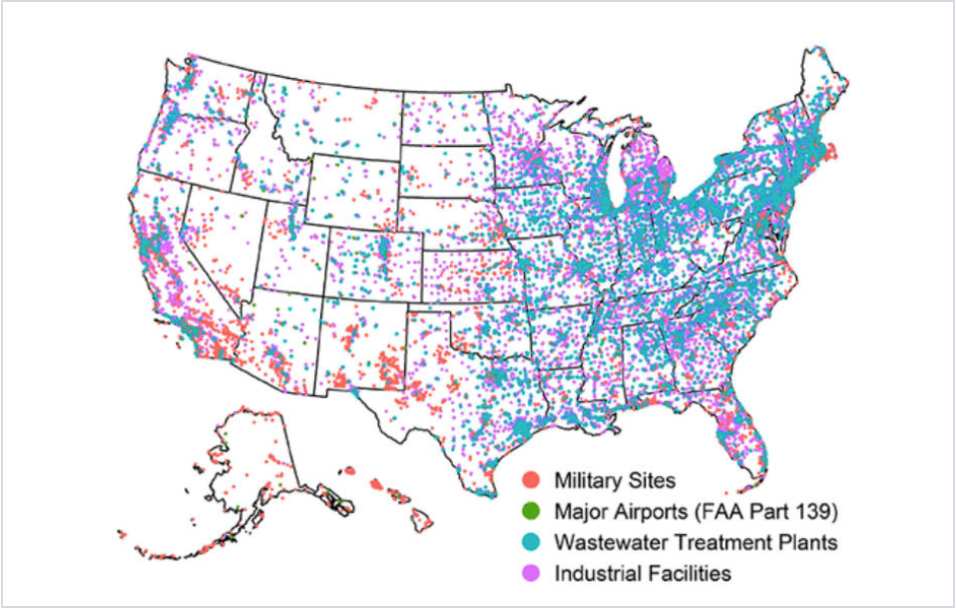
The scale of the challenge cannot be overstated. In the US, an estimated 57,000 sites are presumed to be PFAS-contaminated, spanning industrial facilities, former military bases, airports, and water treatment plants[1] (Figure 3). That fact is the consequence of five decades of industrial development, mostly by 3M and DuPont, that employed PFAS chemicals because of their highly unusual performance characteristics. The widespread use began in the late 1940s, but recognition of health risk did not emerge until the late 1990s and early 2000s.

In the US, an estimated 57,000 sites are presumed to be PFAS-contaminated.

The US Department of Defence has estimated cleanup costs of approximately US$9.3bn across 718 identified military sites, while the EPA has allocated up to US$9bn under the Bipartisan Infrastructure Law to address PFAS in drinking water. In Australia, more than 1,700 contaminated sites have been identified, with 28 classified as high priority. Collectively, the US and Australia alone are deploying more than US$10bn annually toward PFAS remediation, and the budgets are expanding as regulatory standards tighten. And of course, none of this accounts for potential lawsuits from people affected given the impact on the body. Ongoing exposure can translate into a meaningful cumulative burden over time, even at low levels. Many compounds can be reabsorbed in the proximal tubules via specialised transporter proteins, effectively recycling them back into the bloodstream rather than being excreted.

In Australia, an estimated 1,700 sites are presumed to be PFAS-contaminated.

Figure 3: Potentially PFAS-contaminated sites



Source: ACS Publications, Salvatore et al. (the presumptive contamination model).

[1] Salvatore, D. et al. (2022) Presumptive Contamination: A New Approach to PFAS Contamination.

Other approaches don't destroy PFAS, but ECT's does

Existing solutions do not destroy PFAS.

The persistent challenge in the PFAS remediation market is that most established approaches do not destroy PFAS. There are two approaches: one is the band-aid solution of simply excavating contaminated soil and dumping it in a landfill rather than treating it. Monetary costs of doing so range from US$270 to US$460 per tonne and the long-term liability just shifts to containment performance at a landfill site. Another is soil washing which separates PFAS from coarser soil fractions, but generates a concentrated fines stream that still requires treatment or disposal. On a capital-intensity basis, soil washing plants typically require minimum volumes of around 10,000 tonnes and throughput of 20 to 50 tonnes per hour to be economical, implying substantial upfront infrastructure. Neither method permanently solves the problem.

ECT's REM technology targets PFAS destruction directly. By passing a high-voltage electrical pulse through contaminated material, the process generates temperatures above approximately 1,000 degrees Celsius within seconds to minutes, which is sufficient to break the carbon-fluorine bonds in PFAS and convert the fluorine atoms into inert calcium fluoride, a stable, naturally occurring mineral. Critically, REM is designed to close a full fluorine mass balance — the proof that PFAS is destroyed, not merely removed.

REM is designed to produce a full fluorine mass balance, and this is the proof that PFAS disappears.

Why? Because it accounts for where all fluorine atoms go after treatment, rather than only measuring whether target PFAS compounds remain detectable. And in the case of ECT's REM, the fluorine atoms are mineralised into inorganic salts such as calcium fluoride. To put it in other words, this method shows that PFAS has been destroyed and converted into a safer mineralised form vs just making it appear that PFAS is gone just because certain compounds are no longer detected – in which case short-chain PFAS or other toxic fluorinated byproducts may have formed. Some treatment methods can give the latter impression by fragmenting longer-chain PFAS into shorter-chain variants or produce other fluorinated intermediates without demonstrating complete mineralisation, and these can be nearly as (if not more) hazardous as the original PFAS compounds. An appropriate analogy to use is that other methods may show a chain of marbles is no longer present but ECT accounts for individual marbles themselves.

Beyond the efficacy, ECT's approach is more cost-effective too. It is estimated to run at approximately US$75 to US$143 per tonne in electricity costs[2], implying a cost efficiency advantage of roughly 25% to 62% versus soil washing and 47% to 84% versus excavation-based approaches, before accounting for capital expenditure[3]. Given the licensing and OEM partnership model ECT is pursuing, the capital intensity should also be materially lower than fixed infrastructure-based remediation plants.

[2] Cheng, Y. et al. (2024) 'Electrothermal mineralization of per- and polyfluoroalkyl substances for soil remediation', Nature Communications.
[3] Pitt Street Research estimates based on comparison of cost per tonne on legacy remediation methods.

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Building the moat before the rules are written

One of the key pillars of the ECT investment story is regulatory alignment, getting in front of the right people and building the evidence base to have the technology backed by those who matter. To that end, management has submitted a formal comment to the US Environmental Protection Agency (EPA), the federal regulator responsible for setting environmental standards, enforcing federal environmental laws, and effectively giving the green light to clean technologies like ECT's.

Regulatory guidelines are becoming tighter in the remediation of PFAS.

The bar is rising

The submission outlines REM's approach to destroying PFAS, and the timing is what makes it important. Regulatory guidelines around PFAS destruction are tightening fast, and the EPA's evolving framework will increasingly demand not just that PFAS levels come down, but that companies can prove exactly where every fluorine atom ends up.

What currently separates ECT from competitors is that REM doesn't just destroy PFAS; it converts the fluorine into calcium fluoride, a stable, non-toxic mineral that occurs naturally in the environment. This is the core of ECT's regulatory advantage. Most competing technologies not only struggle to show PFAS levels coming down, but they struggle to prove what happens to the fluorine atoms afterwards, and in many cases the breakdown products are volatile fluorides or short-chain PFAS that are just as harmful as – sometimes worse than – the original compounds themselves.

ECT's focus on regulatory alignment becomes a barrier of entry for incumbent firms.

The payoff of getting in early

If ECT continues to build a body of peer-reviewed evidence supporting REM that sits along this framework, the payoff is twofold: it's a credibility milestone with the regulator that effectively sets the global standard, and it becomes a durable competitive advantage as the barrier to entry rises.

That's the crux of "getting in early." As regulations tighten over the next five years, only a handful of technologies will realistically be able to meet the destruction and mass-balance standards regulators are moving toward. For competitors trying to enter the market later, the bar will already be set at a level most existing PFAS treatments can't clear and ECT could have years of validated data behind it.

The bull case from here is straightforward. If REM is deployed at scale, whether at water treatment plants processing spent GAC and resin filters, or on contaminated soil at military bases, airports, and industrial sites, the addressable market is enormous and, at present, largely unserved. If ECT can convert this scientific and regulatory credibility into a validated commercial pathway, meaningful commercial and government contracts over the next few years become a realistic prospect.

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ECT has another major opportunity ahead

ECT's commercial model is designed to embed REM hardware into existing industrial machinery through electrode-based electrothermal systems. By licensing an FJH integrated process into industrial machinery, ECT could supply modular treatment units that can be deployed site by site. The units would be mounted onto existing agricultural and construction equipment that commercial partners already operate. That structure lends itself to monetisation pathways including per-site fees, throughput-based royalties, and equipment supply or licensing arrangements with original equipment manufacturers.

ECT's commercial model is to embed its electrical hardware into existing industrial machinery.

ECT's management team has credible technical depth for this task. In particular, CTO Justin Sharp was part of the original Flash Joule Heating research team at Rice University under Professor James Tour.

Clean water isn't free and the cost is rising

Investors should also look closely at the water treatment opportunity, which we believe is significantly larger than many appreciate. In its 2024 analysis of the PFAS Drinking Water Rule, the US Environmental Protection Agency (EPA) estimated annual compliance costs of approximately US$1.54 billion using its SafeWater model[4]. That figure reflects the cost of bringing public water systems below the new 4 parts-per-trillion (ppt) PFAS limit, plus the associated costs for state regulators.

The drinking water opportunity alone is substantial, with annual compliance costs estimated at US$1.5-3.5 billion.

Importantly, the model only covers public drinking water treatment. It excludes contaminated site clean-up, soil and groundwater remediation, industrial facilities, military bases, airports, landfill remediation and private wells, meaning it captures only a portion of the overall PFAS opportunity.

The biggest assumption in the EPA's model is PFAS occurrence, basically how many of the roughly 66,000 public water systems actually exceed the regulatory limit. This is where the American Water Works Association (AWWA) disagrees[5]. After commissioning Black & Veatch and Corona Environmental to reassess the data, AWWA estimated that more than 7,000 treatment entry points will require capital investment, equating to US$37-48 billion over five years, or US$2.7-3.5 billion annually, which is roughly double the EPA's estimate. We think this highlights that the long-term PFAS remediation opportunity could be materially larger than current government forecasts suggest.

66,000 public water systems which could be PFAS contaminated.

Set against the US$9.3bn in Department of Defense cleanup and investigation costs cited earlier, the scale of the addressable problem becomes clear, and both estimates describe a market that is only expanding.

[4] United States Environmental Protection Agency (2024) Economic Analysis for the Final Per- and Polyfluoroalkyl Substances National Primary Drinking Water Regulation.
[5] Association of State Drinking Water Administrators (2024) *AWWA Releases Updated National PFAS Cost Estimate*.

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GAC will be the first market opportunity

The most immediate commercial opportunity lies in granular activated carbon (GAC), one of the primary technologies used to remove PFAS from drinking water. It is also where we believe REM has demonstrated the strongest commercial potential for three key reasons.

ECT's near-term commercial wedge is GAC, particularly in water treatment plants.

First, GAC is widely used by water treatment plants to capture PFAS from drinking water (Figure 4). Once the carbon becomes saturated, it must be removed and typically transported off-site for incineration. This is where ECT's REM technology fits into the value chain. Rather than transporting hazardous waste, ECT aims to destroy the PFAS contained within spent GAC on-site, potentially reducing both logistics costs and emissions.

Second, the addressable market is substantial. More than 4,000 sites across the US are expected to require PFAS treatment, while around 20 states have already introduced enforceable, health-based limits for at least one PFAS compound. Finally, tighter regulation directly translates into higher GAC demand. Every tonne of GAC used to capture PFAS eventually becomes contaminated waste that must be destroyed. As a result, growth in GAC deployment is also a direct proxy for the long-term destruction opportunity that ECT is targeting with REM.

ECT on site REM reduces the need for transport of hazardous waste.

Figure 4: A typical water treatment plant where GAC is utilised



Source: Envato

Down the track, soil and in situ treatment can follow

GAC in water treatment and GAC in soil remediation are two separate opportunities ECT can pursue in parallel.

While GAC in water treatment is the larger market opportunity for ECT, GAC also has a role in soil remediation through a different process, which adds to the opportunity. That process is low-temperature (around 100°C) steam extraction[6]. Pushing hot steam through the soil does two things: it warms the soil, and it separates the PFAS from the soil particles. The moving vapour then carries the released PFAS to GAC filters, which capture it.

The key point is that the PFAS has not been destroyed at this stage, only relocated into a gas stream and then trapped in the carbon. So as in water treatment, GAC's job is capture, just reached by a different route.

Keeping that clear separates ECT's water-treatment pathway from its in-situ soil remediation pathway. In the longer term, in-situ may be the larger prize, because destroying PFAS where it sits avoids all the hazardous waste handling and transport that removal creates. In the shorter term, GAC is the easier entry point, it is carbon-based and conductive, and the PFAS is already trapped, so part of the work is done.

That leaves one question, what happens to the spent GAC once it is saturated? It is a concentrated waste stream that still has to be destroyed. The pilot REM system which we will discuss below destroys and mineralises it on site, without incineration (Figure 5).

Figure 5: Ex-situ REM Deployment to be used for mineralisation of PFAS in spent GAC



Source: Company.

[6] Brusseau, M.L. and Guo, B. (2024) 'Vapor-phase transport of per and polyfluoroalkyl substances: processes, modeling, and implications', Science of the Total Environment.

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ECT is now at a pivotal point

The pilot REM system is complete

In mid-June, ECT completed the pilot of its REM system, the stage at which the company aims to prove it can replicate its laboratory results at larger scale. The technology has come a long way to reach this point. ECT's earliest proof-of-concept iteration relied on biochar as a conductive additive mixed into the soil, which allowed direct current to pass through the material and break down the PFAS bonds. That was the first step.

ECT's REM system is now on its 3rd iteration with significant improvements.

ECT's engineering team then developed a new system that operated at 70 kHz and 500 volts and removed the need for biochar as a conductive additive in the soil. The breakthrough of this iteration is that the electrical parameters now do the work the biochar once did. The high-frequency current from the system drives heat through the soil directly, eliminating the need for a conductive additive, and it is this that underpins the Flash Joule Heating effect that generates the destructive heat. This is what makes in-situ soil treatment practically viable.

You cannot realistically ask a remediation contractor to pre-mix additives through an entire contaminated site before treatment can begin. By removing that requirement, the new system materially improves the commercial viability of REM.

In mid-June the team completed its third iteration, focused on scaling this new system. The upgraded platform runs at 170 kHz and 2,200 volts, a substantial step up from the prototype, delivering 22 kW of power, roughly 18 times the lab configuration. At the same time, system volume is down about 50% and weight about 75%.

The pilot system has 18x power output of the laboratory configuration.

That physical shrink matters commercially because ECT's licensing model depends on modular units that partners can mount onto or integrate with the agricultural and construction equipment they already operate. The pilot also introduces aerospace-grade electrodes, chosen to withstand the heat and mechanical stress of being driven directly into subsurface soil.

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The next 6-12 months will be important

The next step for the pilot system is testing using PFAS-laden commercial samples. Management has stated that the objective is to confirm that the destruction efficiencies achieved with the prototype, specifically greater than 96% defluorination efficiency and up to 99.98% removal of PFOA, can be replicated and potentially improved using the more powerful platform and that it can do so in a commercially sensible timeframe (within 30 minutes per batch). We'd expect OEM and licensing partner discussions to occur in 2027 assuming success here.

Beyond developments at the individual company level, we think regulatory momentum will also help raise ECT's profile amongst investors. Each tightening of PFAS standards or newly funded remediation program will show how big the PFAS problem is, but it could also expand ECT's addressable opportunity. We don't think we can stress enough that ECT destroys PFAS rather than moving them or hiding them as other solutions do.

Each tightening of PFAS standards or newly funded remediation program will show how big the PFAS problem is, but it could also expand ECT's addressable opportunity.

We observe that ECT is participating in (having made its own submission to) the US Environmental Protection Agency's public comment process on PFAS disposal which only runs once every four years[7]. This may seem a minor point, but this could help attract attention from the EPA and potentially other government or commercial stakeholders, framing it against the proof standards regulators currently care about and are likely to care about. Moreover, feedback will also serve as an internal check: does it have the evidence needed before broader deployment?

[7] See ASX announcement 29 June 2026.

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Valuing ECT across the PFAS value chain

Our valuation of ECT is anchored to a comparable peer set spanning the full PFAS value chain, allowing investors to understand both where ECT sits today and the re-rating opportunity embedded in the destruction pathway, currently the fastest-growing segment, which is forecasted to grow at a ~10% CAGR[8]. To appreciate that opportunity, investors first need to understand the value chain itself.

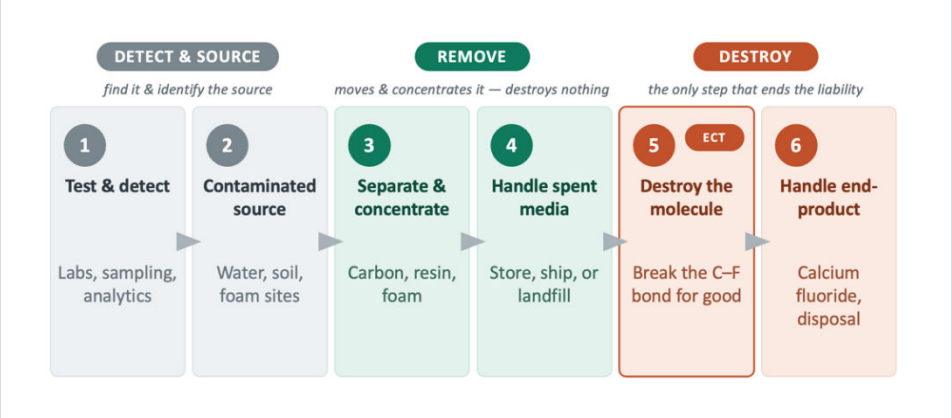
Destruction pathways in the value chain are the fastest growing segment.

The majority of PFAS-related remediation spending to date, including the bulk of the ~US$9bn in cleanup costs estimated by the US Department of Defense, has been directed at the capture and separation stages (Stages 1, 3 and 4 in Figure 6). These stages remove PFAS from the affected medium but do not eliminate it; they concentrate and relocate the liability rather than resolve it. The destruction pathway (Stages 5 and 6), by contrast, is the only part of the chain that permanently breaks down PFAS and extinguishes the underlying liability.

Majority of spending and investment is still in stages 3 &4.

Much of this destruction pathway however remains at prototype stage, with no public company we are aware of yet destroying PFAS at scale, which is precisely what makes the opportunity compelling, combining the fastest-growing structural segment in the value chain with a genuine first-mover position. Should ECT continue to build on the success of its pilot program and its research collaboration with the EPA, we believe it is well positioned to step into that role.

Figure 6: The PFAS remediation value chain



Source: PSR.

[8] Grand View Research 2025, PFAS Treatment Market Size, Share & Trends Analysis Report By Technology Type.

ECT comparable universe

Our comparable set, presented in Figure 7, splits the Tier 1 peer universe into two segments: one grouped by stage of technological development, from successful pilot programs onward, and one by position along the PFAS value chain, with each peer's market re-rating mapped against that progression.

Our peer group splits into two segments: the first based on successful pilot development, the second on PFAS remediation focus.

Figure 7: Comparable Companies Analysis PFAS Remediation Peer Universe

Company	Ticker	Value Chain Segment	Market Cap (AUD$m)
Environmental Clean Technologies	**ASX:ECT**	**Destruction, thermal (REM / FJH)**	**50**
Tier 1 — Succesful Pilot Program Development			
Aduro Clean Technologies	NASDAQ:ADUR	Early Stage Destruction	801
Metallium	ASX:MTM	N/A	292
Tier 1 — PFAS Remediation Across The Value Chain			
Arq Inc	NYSE:ARQ	Capture media, activated carbon	136
BioLargo	OTCQX:BLGO	Capture & concentration	53
The Environmental Group Limited	ASX:EGL	Capture & concentration, water treatment	35
374Water	NASDAQ:SCWO	Early Stage Destruction	48
Tier 1 Median			***95***
Tier 1 Mean			***228***
Tier 2 — Diversified Environmental Services with PFAS Exposure			
Veolia Environnement	EPA:VIE	Utility, water & waste management	44,029
Xylem	NYSE:XYL	Equipment, water technology	40,704
Clean Harbors	NYSE:CLH	Disposal & destruction, hazardous waste	22,090
Enviri Corporation	NYSE:NVRI	Treatment & disposal, contaminated materials	928
Tier 2 Median			***31,397***
Tier 2 Mean			***26,938***
Peer Group Median (All)			**547**
Peer Group Mean (All)			**10,912**
ECT as % of Tier 1 Median Market Cap			**52.8%**

Source: PSR & Peer Company Filings.

Successful pilot program development

Metallium and Aduro anchor the re-rating trajectory available to technologies that clear the prototype stage and move into scaling and commercial pipeline development. Neither is a direct PFAS play, but both illustrate what the market is willing to pay for a successfully executed pilot program and both have since exceeded an AUD$250m market capitalisation.

MTM & ADUR show how the market assigns value to successful pilot stage programs.

Metallium applies the same Flash Joule Heating technology as ECT, although directed at metal recovery rather than PFAS; having demonstrated successful early-stage pilot development, it is now scaling its small modular reactors for metal recovery. It also acts as a credibility anchor for the Flash Joule Heating technology.

9 All Figures from peer universe sourced from Capital IQ on the 10th of July 2026.

Aduro, a chemical recycling company, commissioned its NGP pilot plant in 2026 to process end-of-life plastics and likewise converted that milestone into a strong re-rating. Together, they establish the benchmark of a validated pilot system, where the market delivered a substantial re-rate on the strength of these technical milestones. We believe that ECT can follow a similar path.

PFAS remediation across the value chain

ARQ Inc and BioLargo were selected as companies actively tackling the PFAS problem, though both are focused primarily on Stages 3 and 4 of the value chain, the removal of PFAS. 374Water is the most instructive comparable in the set, as it is the only other company focused specifically on PFAS destruction (Stage 5).

ARQ, BLGO & SCWO are all comparbles within the PFAS remediation value chain.

It is important to note, however, that 374Water's own filings describe its business model, and specifically its AirSCWO system, as fundamentally organic-waste destruction, with PFAS riding along as a by-product rather than the core offering. It is not the pure-play PFAS destruction story that ECT represents. ECT can therefore be viewed as the only pure-play PFAS destruction technology on the ASX.

Valuation: We see upside to $0.26-0.33 per share

Our valuation range is A$0.26 to A$0.33 per share (Figure 8). The next re-rating catalyst is validation of the REM electrical pilot system on PFAS samples in H2 CY2026. Assuming this is successful, we see ECT converging toward the PFAS remediation peer universe in our base case (A$95m, or A$0.26 per share). A strongly executed outcome, combined with EPA traction, would support a technology-precedent re-rate in line with Metallium's post-pilot path, underpinning our bull case (A$120m, or A$0.33 per share).

We see upside of A$0.26 to A$0.33 per share.

Figure 8: Our valuation of ECT

Valuation (A$m)	Base Case	Bull Case
Equity Value of Peer Group (A$m)	**95.4**	**120.4**
Shares outstanding	358.8	358.8
Implied price (A$)	**0.26**	**0.33**
Current price (A$)	0.105	0.105
Upside (%)	**153%**	**219%**

Source: Pitt Street Research

Risks

1. **Scale-up and field performance risk**

   Laboratory destruction efficiencies do not translate cleanly into heterogeneous field conditions. Clay-rich, moisture-variable, and organic-rich soils behave differently from controlled laboratory samples, and incomplete treatment or inconsistent energy coupling in real-world conditions would be a setback. Management is addressing this through the pilot validation program and testing across multiple soil types and PFAS contaminants, but the risk is not retired until field data is in hand.

2. **Engineering execution risk**

   High-voltage electrothermal systems are specialist-intensive and iteration cycles following design flaws can be time-consuming. Delays in hardware validation or field demonstration timelines would extend the period before commercial engagement, potentially increasing cash consumption and requiring capital raising at a less advantageous point in the de-risking curve.

3. **Commercialisation and procurement cycle risk**

   Even strong field data may take considerable time to translate into signed commercial agreements with government, defence, or large industrial remediation buyers. ECT's near-term value inflection is most directly driven by the field demonstration results, but the subsequent commercial steps depend on counterparties with lengthy procurement processes.

4. **Partner dependency risk**

   The OEM integration model means commercial scale depends partly on the willingness and capability of third-party machinery manufacturers and remediation contractors to adopt and deploy the system. Execution is not fully within ECT's control at that stage.

5. **Capital risk**

   ECT remains pre-revenue, with ongoing operating expenditure and field demonstration costs to fund. Investors should watch the company's cash position and any capital raising activity relative to the milestone timeline.

6. **Key personnel risk**

   There is the risk that the company could lose key personnel and be unable to replace them and/or their contribution to the business.

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Appendix I – Analyst Qualifications

Stuart Roberts, lead analyst on this report, has been an equities analyst since 2002.

- Stuart obtained a Master of Applied Finance and Investment from the Securities Institute of Australia in 2002. Previously, from the Securities Institute of Australia, he obtained a Certificate of Financial Markets (1994) and a Graduate Diploma in Finance and Investment (1999).
- Stuart joined Southern Cross Equities as an equities analyst in April 2001. From February 2002 to July 2013, his research speciality at Southern Cross Equities and its acquirer, Bell Potter Securities, was Healthcare and Biotechnology. During this time, he covered a variety of established healthcare companies, such as CSL, Cochlear and Resmed, as well as numerous emerging companies. Stuart was a Healthcare and Biotechnology analyst at Baillieu Holst from October 2013 to January 2015.
- After 15 months over 2015–2016 doing Investor Relations for two ASX-listed cancer drug developers, Stuart founded NDF Research in May 2016 to provide issuer-sponsored equity research on ASX-listed Life Sciences companies.
- In July 2016, with Marc Kennis, Stuart co-founded Pitt Street Research Pty Ltd, which provides issuer-sponsored research on ASX-listed companies across the entire market, including Life Sciences companies.
- Since 2018, Stuart has led Pitt Street Research's Resources Sector franchise, spearheading research on both mining and energy companies.

Nick Sundich is an equities research analyst at Pitt Street Research.

- Nick obtained a Bachelor of Commerce/Bachelor of Arts from the University of Sydney in 2018 and the designation of Financial Modelling & Valuation Analyst by the Corporate Finance Institute. He has also completed the CFA Investment Foundations program.
- He joined Pitt Street Research in January 2022. Previously he worked for over three years as a financial journalist at Stockhead.
- While at university, he worked for a handful of corporate advisory firms.

Charlie Youlden is an associate equities research analyst at Pitt Street Research.

- Charlie holds a Bachelor of Business and Commerce from the University of Technology Sydney. He has also completed the Value Investing Program at Columbia Business School and the Wall Street Prep Financial Modeling course.
- He joined Pitt Street Research in 2025, following experience as the founder of his own business and as an FX hedging broker.
- Charlie has authored equity research reports on ASX-listed and US technology companies and actively shares market insights with a growing professional audience.

General Advice Warning, Disclaimer & Disclosures

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