DEAL 03 OF 06 · ARCHETYPE A · GREEN MANUFACTURING & HEAVY INDUSTRIAL CLUSTER PAGE 1 OF 2 · ORIGINATION & STRATEGY

PROJECT GEOPOLYMER — South-West SIA Circular Manufacturing & Industrial Hub

SOUTH-WEST INDUSTRIAL LGA · Stealth SPV GST Active Sep 2025 · 4.0–7.5 MW high-load-factor C&I · Intercept: T-24m

Owner / SPV Proof	CIRCULAR MATERIALS VENTURE C via stealth property SPV STEALTH PROPERTY (SIA) PTY LTD (ACN 691 XXX XXX / ABN 51 691 XXX XXX), incorporated **16 Sep 2025** with **GST activated 26 Sep 2025**. ASIC + ABR VERIFIED Public website still reads *'Our Projects: Coming Soon'*. Adjacent industrial release held by CATALPA DEVELOPMENTS SPV (ACN 689 XXX XXX, GST Active 23 Jun 2026).
Size & Process Profile	**24/7 Circular Construction Materials Manufacturing Facility** (processing South-West alumina/lithium/silicon industrial byproducts into low-carbon geopolymer materials) + adjacent **Catalpa Drive Kemerton** heavy industrial subdivision lots.
Est. Electrical Load	**4.00 MW** core plant continuous/high-load-factor demand (**22.80 GWh/yr** at 65% load factor for milling, thermal curing & batching), expanding to **7.50 MW (~34.8 GWh/yr)** when bundled with adjacent Catalpa Drive Kemerton industrial lots. MODELLED PROCESS LOAD
Stage & Intercept Window	**Phase 2–3 (Site SPV GST-Activated · Pre-Public Announcement & Pre-DA Lodgement · T-24 Months).** Caught via ASIC/ABR forensics before any public press release or DAP filing.
Mandatory Green Scope 2 Hook	Because the plant manufactures **certified low-carbon circular construction materials** for Tier-1 WA miners and infrastructure projects, buying coal-heavy grid power ruins its Scope 2 product carbon footprint — making an on-site Solar + BESS microgrid mission-critical.

THE GRID PROBLEM (WHY CONVENTIONAL WESTERN POWER SUPPLY FAILS HERE)

- **Kemerton SIA HV Capacity Squeeze:** Fed by ZONE SUBSTATION MRR (MARRIOTT RD) **/ Kemerton** in the South-West SWIS, where heavy industrial expansions (lithium hydroxide trains & silicon smelters) have locked up available HV feeder headroom and triggered multi-year Western Power connection queues.
- **High Load Factor = Maximum Solar + BESS Utilisation:** Unlike residential estates that only peak for 3 hours in the evening, a continuous industrial materials plant runs heavy daytime shifts (absorbing 100% of midday solar PV) plus evening curing cycles.
- **Adjacent Precinct Cluster Opportunity:** Combining Ciraterra's Kemerton plant (`~4.0 MW`) with the adjacent `100 Catalpa Drive, Kemerton` industrial subdivision (`CATALPA BUSINESS PARK DEVELOPMENTS PTY LTD`, GST active `23 Jun 2026`) creates a single Kemerton SIA microgrid hub.

WHY A PRIVATE MICROGRID WINS HERE

- **Executive Team Speaks Infrastructure & BOO Fluently:** Co-founder Ian Meares is a KPMG Engineering Partner and former National MD of Brookfield Multiplex Engineering & Infrastructure who has led alumina decarbonisation and wind/solar/BESS projects — he immediately understands a 25-year off-balance-sheet BOO PPA/microgrid.
- **Preserves Startup Capital for Core Manufacturing Plant:** As a growth-stage industrial manufacturer commercialising Curtin University IP, Ciraterra wants 100% of its equity/debt deployed into processing equipment, not $13M of electrical headworks and solar/battery CapEx.
- **Delivers Verifiable Behind-the-Meter Renewable Certificates (LGCs):** Direct wire connection from Zenith's solar + BESS array gives Ciraterra auditable zero-emission Scope 2 power for its Environmental Product Declarations (EPDs).

CLOSEST ZENITH PRECEDENT

Peel Business Park (EDL7/ERL28) + Zenith Remote/Hybrid C&I BOO Model: Combines Zenith's traditional single-customer industrial BOO expertise with an expandable Kemerton SIA precinct licence (similar to Peel EDL7 and Busselton EDL10).

WHO TO APPROACH (VERIFIED CHANNELS)

- **Co-Founder & Commercial/Legal Lead:** Principal at PERTH COMMERCIAL LAW FIRM C (DIRECT LANDLINE & EMAIL HELD BY HATTR).
- **Co-Founder & Engineering Lead:** Partner, Engineering & Asset Management at BIG-4 ADVISORY FIRM PERTH (DIRECT LANDLINE HELD BY HATTR).
- **Adjacent Kemerton Landholder:** CATALPA DEVELOPMENTS SPV (100 Catalpa Dr, Kemerton).

LICENCE & REGULATORY ROUTE

Single-site behind-the-meter BOO PPA / embedded network or EDL10/ERL33 non-contiguous licence amendment covering the wider Catalpa Drive Kemerton precinct.

KEY RISK Plant engineering and environmental approvals are still in pre-DA design; Zenith must engage Ian Meares & Matt Barone now so the microgrid is baked into their EPA/DWER and Western Power applications from Day 1.

NEXT STEP Unlock hattr's unredacted dossier to call CO-FOUNDER ENGINEERING PARTNER and CO-FOUNDER LEGAL PRINCIPAL in Perth.

1 Federal ASIC & ABR Registers (Reg 16 Sep 2025, GST Active 26 Sep 2025; ACN/ABN REDACTED) · 2 Corporate Filings & Curtin University Commercialisation Records (URL REDACTED) · 3 Kemerton SIA / Marriott Rd Substation Data · 4 Slide 4 Unbundled C&I Bill Model ($536,448.38 / 2.0 GWh).

DEAL 03 OF 06 · ENGINEERING SIZING, LOAD PHYSICS & 25/30-YR BOO MODEL

PROJECT GEOPOLYMER — South-West SIA Circular Manufacturing & Industrial Hub — Quantitative Feasibility

Calibrated to Zenith Slide 3/4 Benchmarks ($536,448.38 / 2.0 GWh = 26.82 c/kWh), Western Power 2026/27 Tariffs & WEM IRCR Credits

PLANT + PRECINCT LOAD	BOUNDARY METER CMD	RENEWABLE FRACTION	25-YR BOO REVENUE
4.00 MW Core (7.5 MW Hub)	**2.50 MW (2.78 MVA)**	**~48.5% Behind-the-Meter**	**$136.6M Contracted**
22.80 GWh/yr (65% LF)	1.50 MW Peak Shaved	Scope 2 Green EPD Ready	$2.28M/yr Net EBITDA

1. BOTTOM-UP ELECTRICAL LOAD & FEEDER DEFICIT DERIVATION

Step 1 — Continuous Circular Materials Process Demand (High Load Factor C&I)

`4.00 MW peak process demand × 5,700 equivalent full-load hrs/yr (65% LF) = 22.80 GWh/yr (11.40 × the 2.0 GWh Slide 4 unit)`

Industrial grinding, geopolymer mixing, and thermal curing run high daytime/evening duty cycles (plus +12.0 GWh/yr upside on adjacent Catalpa Dr lots).

Step 2 — Why High Load Factor Supercharges Slide 4 Network & IRCR Savings

`Standard Bundled Tariff @ 22.80 GWh = $6,115,512/yr ($1,830,908 WP Network + $1,020,004 IRCR Peak Capacity)`

By shaving peak demand behind a 2.50 MW boundary connection and supplying 11.05 GWh/yr via on-site Solar+BESS, over 50% of non-energy charges are displaced.

Step 3 — Optimal Solar PV + 3.4-Hour BESS Dispatch Physics

`5.50 MWp Ground/Roof Solar PV (~9.08 GWh/yr) + 3.50 MW / 12.00 MWh BESS = 11.05 GWh/yr Behind-the-Meter Dispatch`

Daytime milling directly consumes ~5.2 GWh of live solar; the 12 MWh BESS stores ~3.9 GWh of excess solar + off-peak power to flatten the 16:00–21:00 peak.

Step 4 — Expansion to Full Catalpa Drive Kemerton Hub (7.50 MW / 34.80 GWh/yr)

`Adding the adjacent 100 Catalpa Dr industrial subdivision (+3.50 MW / +12.00 GWh/yr) lifts BOO EBITDA from $2.28M/yr to ~$3.45M/yr`

Gives Zenith a second South-West industrial microgrid hub halfway between Peel Business Park (EDL7) and Busselton (EDL10).

2. OPTIMAL MICROGRID PLANT SIZING & DISPATCH SPECIFICATION

Microgrid Subsystem	Engineered Rating	Dispatch Physics & Commercial Role
Western Power Boundary Connection (CMD)	2.50 MW (2.78 MVA)	Single 22 kV HV connection (bypasses Kemerton SIA deep augmentation queue)
On-Site Ground + Roof Solar PV	5.50 MWp DC / 4.40 MW AC	Generates ~9.08 GWh/yr with retired LGCs for Ciraterra's low-carbon product certification
Industrial LFP Battery System (BESS)	3.50 MW / 12.00 MWh	3.4-hr duration; guarantees firm power quality and shaves 100% of Hot-Season IRCR intervals
On-Site Solar + BESS Self-Sufficiency	~48.5% Behind-the-Meter	11.05 GWh/yr supplied locally; 11.75 GWh/yr imported off-peak via skinny boundary meter

3. UNBUNDLED TARIFF & REVENUE STACK (SLIDE 4 BENCHMARK SCALED TO 22.80 GWH/YR)

Bill Component (Slide 4)	Share	Unit Rate	2.0 GWh Ref	Full Estate (11.4x)	How the Microgrid Captures / Displaces It
Variable Wholesale Energy	37.55%	10.01 c/kWh	$200,224	$2,282,554	Replaced by on-site Solar PV (~45–62%) + cheap off-peak grid import
Western Power Network (UOS/CMD)	30.12%	8.03 c/kWh	$160,606	$1,830,908	Slashed via single skinny HV boundary meter (<=3.5 MW CMD) + internal LV ring
Peak Capacity / WEM IRCR	16.78%	4.47 c/kWh	$89,474	$1,020,004	Shaved during the 12 Hot-Season peak intervals + earns ~$216k/MW/yr IRCR credits
Market Fees & Retail Margin	11.16%	2.98 c/kWh	$59,506	$678,368	Captured directly by Embedded Network / Microgrid Operator
Environmental Certificates (LGC/STC)	4.39%	1.17 c/kWh	$23,408	$266,851	Generated on-site by behind-the-meter Solar PV array
TOTAL BUNDLED GRID BENCHMARK	100.0%	26.82 c/kWh	$536,448	$6,115,512 / yr	**62.45% is Non-Energy (46.90% WP Network + IRCR alone)**

4. 25/30-YEAR BUILD-OWN-OPERATE (BOO) P&L, CAPEX & DEVELOPER SAVINGS

ANNUAL MICROGRID P&L RUN-RATE (FULL BUILD)

Gross Bundled Grid Equivalent (22.80 GWh/yr)	$6,115,512/yr
Less: Customer Tariff Discount (21.5%)	-20% to -22%
Net Behind-the-Meter Retail + Network Revenue (~90–95%)	$4,800,677/yr
Plus: WEM IRCR Peak Capacity & NSSS Credits (~5–10%) 3.08 MW net peak reduction across WEM Hot-Season IRCR intervals × ~$216,000/MW/yr capacity credit value	+$665,000/yr
Total Addressable Microgrid Revenue	$5,465,677/yr
Less: Off-Peak Grid Import, Skinny CMD Tariff & O&M Includes 11.75 GWh off-peak grid import, single 2.5 MW CMD network tariff, O&M, and asset insurance	-$3,185,677/yr

CAPEX, RETURNS & DEVELOPER DEAL HOOK

ESTIMATED TURNKEY BOO CAPEX BREAKDOWN

Solar PV (5.5 MWp @ $1.10M/MWp = $6.05M) + BESS (12.0 MWh @ $0.56M/MWh = $6.72M) + HV Switchgear & Microgrid Controls ($1.63M) = $14.40M Total CapEx

PROJECT RETURNS & CONTRACTED ANNUITY

`6.3 Years Simple Payback · ~15.1% Unlevered Pre-Tax IRR · $136.6M 25-Year Contracted Revenue (Core Plant Only)`

WHY THE DEVELOPER SIGNS (CAPEX & TIME SAVED)

Saves Ciraterra $14.4M in upfront energy infrastructure CapEx, cuts power costs by >21% ($1.31M/yr saving), and delivers certified behind-the-meter renewable power for its green construction materials.