

Apex Centinel Energy Project Brief

1. Project Overview

Objective:

To convert stranded or flared natural gas on a residential or commercial property in the Permian Basin into a consistent stream of electricity for resale to ERCOT and/or use in behind-the-meter Bitcoin mining. The project aims to generate sustainable revenue and establish infrastructure that supports future scalability.

2. Technical Scope

Generation System:

- Natural Gas Generator: 500-750 kW capacity
- Daily Output: 12,000-18,000 kWh
- Monthly Revenue Potential: \$32,000-\$50,000

Natural Gas Feed:

- Source: Onsite or nearby flared gas well (100-150 MCF/day)
- BTU: ~1,000 BTU/ft
- Treatment: HS removal, dehydration, compression as needed

Bitcoin Mining (Optional Hybrid):

- 30-60 Antminer S19 units
- Approx. 0.05-0.10 BTC/month at current difficulty
- Electricity cost basis: ~\$0.05/kWh

3. Site Criteria

Location: Coyanosa, Imperial, or outside Odessa/Midland

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Lot Size: 1-5 acres

Price Range: \$2,500 - \$20,000

Zoning: Light industrial, energy, or ag/commercial

Infrastructure: Access roads, proximity to gas taps or wellhead

4. Budget Breakdown

Generator (500-750 kW): \$150,000 - \$200,000

Gas processing: \$40,000 - \$50,000

Switchgear, housing, monitoring: \$50,000 - \$60,000

Site prep, trenching, fencing: \$25,000 - \$35,000

Land: \$10,000 - \$30,000

Interconnection or mining hardware: \$45,000 - \$100,000

Permits, legal, contingency: \$30,000 - \$50,000

Total Budget: \$475,000 - \$500,000

5. Revenue Models

A. Sell to ERCOT:

- Register with ERCOT or QSE
- Participate in real-time pricing or contracts
- \$30,000-\$50,000 monthly revenue

B. Mine Bitcoin:

- Use power internally to mine BTC
- 0.05-0.10 BTC/month

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C. Hybrid:

- Split: 50% ERCOT, 50% Bitcoin
- Hedge and price arbitrage

6. Project Timeline

Site selection: 2-4 weeks

Equipment purchase: 4-6 weeks

Site preparation: 4-6 weeks

Commissioning: 2 weeks

Total: 2-3 months

7. Compliance & Legal

- TCEQ air permits required
- ERCOT registration via QSE or aggregator
- Bitcoin mining needs no special licensing off-grid
- Confirm local zoning rules

8. Growth & Exit

- Reinforce revenue into scaling to 1 MW+
- Expand generator bank
- Attract \$2M+ investor pool
- Optional: Tokenize in Web3 framework