# ThermAl Token (THRM) - Whitepaper V2

# The Definitive Guide to the ThermAl Ecosystem

**Before we start:** This whitepaper is highly detailed and comprehensive—it's the full guide to ThermAI and may take more than one coffee to read and digest. If you're looking for a shorter overview or an investor-specific summary, please check out our **Litepaper** and **Insitepaper**, both available on our website: <a href="www.ThermAI.uk">www.ThermAI.uk</a>

# 1. Introduction

ThermAl is an innovative project combining sustainable heating solutions with blockchain technology. By leveraging excess heat generated by GPU-based computation, ThermAl aims to provide affordable, efficient, and eco-friendly heating for homes while simultaneously enabling POW & PoUW mining, advanced computation & decentralised storage. Our mission is to decentralise access to computing power, advance sustainable energy use, and empower communities through the ThermAl ecosystem.

The problem ThermAl addresses is twofold:

- The significant energy waste in traditional computation due to heat dissipation.
- The growing demand for cost-efficient, renewable heating solutions for domestic and social housing.

By integrating advanced blockchain systems with practical heating applications, ThermAl bridges the gap between decentralised computing and real-world impact.

# 1.1 Company Visions

### ThermAl Dynamics UK Ltd Vision

ThermAl Dynamics UK Ltd focuses on transforming computational heat waste into sustainable heating solutions with the **ThermAl Nodes**. These are advanced, network-connected devices equipped with multiple GPUs designed to perform POW & PoUW while capturing and converting the resultant heat into hot water and central heating. By integrating with solar panels and batteries, **ThermAl Nodes** maximise renewable energy use and are pre-configured to operate efficiently with flexible energy tariffs. The company targets social housing and local councils initially, aiming for affordability, sustainability, and scalability into private markets and international operations.

#### ThermAl Token Ltd Vision

ThermAl Token Ltd represents a foundational step in realising the vision of ThermAl by bridging the gap between funding needs and community involvement. Launching the **THRM token** allows us to raise the necessary capital to develop our innovative **ThermAl Nodes**, transitioning them from a conceptual stage to widescale deployment. Beyond funding, the token forms the backbone of a thriving ecosystem, creating opportunities for supporters to share in our success.

The **THRM token** is more than just a fundraising tool; it is a viable and self-sustaining business designed to deliver value to its holders. By creating a robust rewards system, we incentivise token holders to actively support the development of **ThermAl Nodes** while fostering long-term engagement and loyalty. The ecosystem will provide diverse opportunities, such as staking rewards, liquidity mining, partner mining rewards, and exclusive access to future developments.

We aim to reward supporters fairly and transparently, ensuring their participation directly contributes to the success of ThermAI. By aligning the interests of ThermAI and its community, the **THRM token** becomes a symbol of collaboration, innovation, and shared prosperity.

# 1.2 Company Structure

ThermAl operates under a structured group framework to ensure transparency, scalability, and efficiency in managing both hardware operations and blockchain ecosystems. The structure is as follows:

#### ThermAl Group Ltd

- The parent company oversees strategic decision-making and financial reinvestments.
- Responsible for managing subsidiaries and ensuring operational alignment across the group.
- Allows income and profits to be transferred between subsidiary companies in a tax-efficient manner, meaning more can be given back to the community.

### ThermAl Dynamics UK Ltd

- Focuses on hardware operations, including ThermAl Node development, manufacturing, and installation.
- Generates revenue from ThermAl Node sales, installations, and mining profits from deployed nodes.

#### ThermAl Token Ltd

 Manages the token ecosystem, including **THRM** tokenomics, staking rewards, transaction fees, and smart contracts.  Oversees the development of future blockchain initiatives, such as the ThermAl Node Profits Pool.

The financial integration ensures that profits from both ThermAl Dynamics UK Ltd and ThermAl Token Ltd flow to ThermAl Group Ltd in a tax-efficient way. ThermAl Group Ltd reinvests these profits into scaling operations, advancing token development, fostering strategic partnerships, and increasing distribution to the community by supporting staking and liquidity mining pools.

# 2. Introduction to the THRM Token

The **THRM token** is the core of the ThermAl ecosystem, built on the Polygon POS Chain to leverage its low-cost, high-speed transaction capabilities and environmental sustainability. Polygon's scalability ensures a robust platform for the token's diverse use cases and ecosystem growth.

To facilitate community participation and raise capital, the token launch will include both private and public pre-sales, which will be conducted on DxSale. This platform offers enhanced security, decentralisation, and transparency, ensuring a fair and reliable process for all participants. This dual-round structure allows early supporters to participate while ensuring broad accessibility to the public.

The **THRM token** will also feature multiple pools to support various ecosystem functions and reward supporters:

- Staking Rewards Pool: Incentivises community participation by offering rewards for staking THRM tokens.
- Liquidity Mining Pool: Ensures stability and growth within the ecosystem by rewarding users who add liquidity to trading pairs on DEXs.
- **Partner Mining Pools**: Allows participants to earn rewards by mining coins from official ThermAl partners, strengthening collaboration and utility.
- ThermAl Profit Pool: Distributes a share of the mining profits from ThermAl Nodes back to the community once these nodes are fully developed and deployed.

These pools are designed to reward participants fairly while driving engagement and ecosystem stability.

# 3. Tokenomics

ThermAl tokens (**THRM**) underpin the ecosystem, facilitating staking, liquidity, marketing, and operational growth with a balanced and transparent distribution.

Category	% Percentage	# Tokens	Purpose
Private Sale	10%	100,000,000	Raise initial funds from early investors. See vesting schedule.
Public Sale	15%	150,000,000	Public IDO on DxSale to fund development and scale operations via public offering.
Staking Rewards	15%	150,000,000	Distributed over 5 years for flexible and fixed-term staking.
Liquidity Pool	10%	100,000,000	Add liquidity to trading pairs (e.g., THRM/MATIC) on DEXs.
Liquidity Mining Pool	10%	100,000,000	Incentivise liquidity providers over 5 years, with dynamic APY to encourage participation.
Partner Mining Rewards	5%	50,000,000	Fixed allocation rewarding participants contributing to partner mining networks.
Marketing & Community Pool	5%	50,000,000	Support marketing campaigns, bounties, airdrops, and community engagement initiatives.
Team & Advisors	10%	100,000,000	Reward team and advisors. See vesting schedule.
Flexible Reserve	10%	100,000,000	Reserved for future needs, including ecosystem expansion and unforeseen opportunities.
Treasury Pool	10%	100,000,000	Fund ongoing operations, partnerships, audits, and unforeseen opportunities.

# Total: 1,000,000,000 THRM

We are minting a total of **1 billion THRM tokens**, representing the total fixed supply of the ecosystem. No additional tokens will ever be minted, which ensures the long-term scarcity and value of the token. This immutability provides transparency and builds trust within the community, as token holders can be assured of a stable and predictable supply. This fixed cap also aligns with our commitment to sustainable and equitable growth, reinforcing the economic integrity of the ThermAI ecosystem.

# 4. Public & Private Sale

The ThermAl token sale is designed to provide fair access to strategic investors and the wider community while ensuring transparency, security, and long-term value creation. This section outlines the allocation, pricing, and objectives of both the Private and Public Sale, as well as the benefits of utilising DxSale to conduct these offerings.

### 4.1 Private Sale

#### **Allocation & Pricing**

• Allocation Percentage: 10% of total token supply

• Total Tokens Available: 100,000,000 THRM

• **Pricing:** £0.0015 per token

#### Purpose

The Private Sale aims to secure early funding to advance ThermAl's development efforts, especially the progression of the **ThermAl Node** from prototype to wide-scale distribution. By focusing on strategic investors and early supporters who share ThermAl's vision, the Private Sale ensures that initial stakeholders are aligned with the project's long-term goals.

#### Platform

• **DxSale for Private Sale:** The Private Sale will be hosted on DxSale, offering a secure and decentralised environment for early contributors.

### **Target Audience**

ThermAl seeks investors who bring more than just capital—namely partners and early supporters who provide industry connections, technical insights, and opportunities for long-term ecosystem growth.

### 4.2 Public Sale

## **Allocation & Pricing**

• Allocation Percentage: 15% of total token supply

• Total Tokens Available: 150,000,000 THRM

• **Pricing:** £0.0020 per token

• Target Listing Price: £0.0030 per token

## **Purpose**

40% of the proceeds from the Public Sale will be allocated towards scaling ThermAl's operations, accelerating the deployment of **ThermAl Nodes**, and strengthening token liquidity. **60%** of the sale will be automatically **allocated to the liquidity pool**. By making THRM tokens accessible to a broader community, ThermAl seeks to foster a strong and diverse holder base that will actively participate in the ecosystem.

#### **Platform**

• **DxSale for Public Sale:** The Public Sale will also be conducted on DxSale, providing a consistent, trustless framework for token distribution.

#### **Price Differentiation and Mitigation Strategies**

## • Why the Listing Price is Higher:

ThermAl has set a target listing price of £0.0030, exceeding the Public Sale price of £0.0020 per token. This pricing approach aims to reward and incentivise early adopters who participate in the Public Sale, reflecting the added value of a maturing project moving closer to full deployment of ThermAl Nodes.

#### Potential for Immediate Profit:

While public buyers could theoretically sell off their tokens at or near the listing price for an immediate profit, ThermAl believes that the long-term fundamentals of the project will encourage holders to remain invested.

# • Mitigation Through Staking and Ecosystem Incentives:

To further encourage long-term participation, ThermAl will introduce a robust **Staking Pool** that offers attractive rewards for those who stake their **THRM**. By staking, holders can earn additional tokens and thereby benefit more over time than from a quick sale. This strategy not only fosters price stability but also helps cultivate a committed community of token holders who are aligned with ThermAl's growth objectives.

#### **Measures to Ensure Investor Confidence**

 Liquidity Lock: A 2-year liquidity lock on the THRM/MATIC pair on Uniswap will be implemented, preventing premature liquidity withdrawal and reinforcing ThermAl's commitment to longevity.

# 4.3 Benefits of Using DxSale

# • Enhanced Transparency:

DxSale's smart contract-driven approach creates a verifiable audit trail of contributions and token distributions, reducing the need for manual oversight.

# • Simplified User Experience:

An intuitive, user-friendly interface lowers the barrier to entry, making it easier for both technical and non-technical participants to take part in the sale.

# • Built-in Security Features:

DxSale includes safeguards to minimise the risk of malicious activities, helping increase investor confidence.

#### Reduced Administrative Overhead:

With automated sales and distributions, the ThermAI team can focus on key objectives such as ThermAI Node development and marketing rather than manual administration.

# 4.4 Transparency and Trust

ThermAl remains committed to maintaining a high level of transparency and trust throughout both token sales and beyond.

### Allocation of Funds:

Funds raised will be channelled into priority areas, including:

- ThermAl Node Development: Moving from prototype to large-scale distribution.
- Marketing & Community Building: Growing awareness and fostering active engagement.
- Partnerships & Integrations: Expanding collaboration with ecosystems and industry partners.
- **Token Liquidity:** 60% of the Public Sale will be automatically allocated to DEX liquidity. Ensuring sufficient liquidity on decentralised exchanges for a stable THRM market.
- Community Trust Measures:
- Clear Communication: Regular updates on milestones, new partnerships, and fund usage.
- Frequent Reporting: Periodic reports detailing ThermAl Node roll-out progress, marketing efforts, and expenditures.
- Transparent Fund Allocation: Publication of all major fund movements, enabling stakeholders to track how capital is deployed.

By combining robust fundraising strategies, fair pricing, and transparent operations, ThermAI is dedicated to building a value-driven ecosystem that benefits both early investors and the broader community in the long run.

# 5. Vesting Schedules

To ensure market stability, investor confidence, and long-term alignment with ThermAl's goals, we have implemented structured vesting schedules for key token allocations. These schedules balance liquidity for stakeholders with the project's growth and ecosystem stability.

# 5.1 Private Sale Vesting Schedule

#### **Token Allocation**

- 10% of the total token supply (100,000,000 THRM tokens).
- Purpose: Raise initial funds for development, manufacturing, and operational expenses.

#### Cliff Period:

- 6 months: No tokens will be released during the first six months after the Token Generation Event (TGE).
- Rationale: Ensures market stability and aligns private investors with the project's early milestones.

### Post-Cliff Token Release:

- Month 6: 20% of allocated tokens will unlock immediately after the cliff period.
- Months 7–14: The remaining 80% of tokens will vest linearly, with 10% unlocked per month.

### Schedule Overview:

- Months 0-5 (Cliff Period): No tokens released.
- Month 6: 20% of the allocation unlocked.
- Months 7–14: 10% unlocked monthly.

### **Total Vesting Period**:

• 4 months, including the 6-month cliff and 8-month vesting period.

# 5.2 Team Vesting Schedule

#### Token Allocation:

- 10% of the total token supply (100,000,000 THRM tokens).
- Purpose: Reward the core team for their contributions and incentivise long-term commitment to ThermAl's success.

#### Cliff Period:

- 12 months: No tokens will be released during the first year.
- Rationale: Ensures team members remain fully committed through the critical early stages
  of the project.

#### Post-Cliff Token Release:

- Month 12: 10% of allocated tokens will unlock immediately after the cliff period.
- Months 13–36: The remaining 90% of tokens will vest linearly over 24 months.

#### Schedule Overview:

- Months 0–11 (Cliff Period): No tokens released.
- Month 12: 10% of the allocation unlocked.
- Months 13–36: 3.75% unlocked monthly.

# **Total Vesting Period**:

• 36 months (3 years), including the 12-month cliff and 24-month vesting period.

# 5.3 Summary of Vesting Approach

These vesting schedules ensure that key stakeholders are incentivised to support ThermAl's long-term growth while minimising market volatility. The structured release of tokens aligns with the project's milestones and provides a balanced approach to liquidity and ecosystem stability.

# 6. Liquidity Pool

### 6.1 Overview

The **Liquidity Pool** allocation within ThermAl's tokenomics is designed to provide sufficient liquidity for the **THRM token** on decentralised exchanges. Liquidity is a fundamental component of any token ecosystem, ensuring that users can seamlessly trade **THRM tokens** with minimal price impact, even during periods of high trading activity.

The liquidity pool serves several key purposes:

- Market Stability: By providing deep liquidity, the pool minimises price volatility, encouraging confidence among traders and investors.
- Ease of Access: A well-funded liquidity pool ensures low slippage, making it easy for users to buy or sell THRM tokens at fair market prices.
- **Growth Enablement:** Sufficient liquidity enables the project to attract additional users, traders, and investors, promoting the long-term adoption of **THRM**.

# 6.2 Allocation and Locking Strategy

ThermAl has allocated **10% of the total token supply (100 million THRM)** to the Liquidity Pool. This allocation is intended to support the initial launch of the token and provide a stable trading environment from day one. The key details of the liquidity strategy are as follows:

#### **Initial Deployment:**

- **60 million THRM** will be deployed to the liquidity pool at the time of the public sale (Year 1).
- The remaining **40 million THRM** will be released in annual increments of **10 million THRM** over Years 2–5.

# **Liquidity Locking:**

The initial liquidity provided at the time of the public sale will be locked automatically by
 DxSale for 2 years. This ensures that the core liquidity cannot be withdrawn prematurely,
 protecting token holders and fostering trust within the community.

### **Future Expansion:**

While the initial liquidity pool will focus on the THRM/MATIC trading pair, ThermAl plans to
expand to additional pairs over time, such as THRM/USDT or tokens from partner projects
like FLUX. This diversification will broaden access to THRM and increase trading
opportunities across multiple ecosystems.

# 6.3 Tokenomics and Liquidity Table

The following table outlines the projected annual distribution of **THRM tokens** and liquidity growth targets over the first five years. These figures form the foundation for ThermAl's liquidity strategy:

Category	# Year 1	# Year 2	# Year 3	# Year 4	# Year 5	Bonus (Remaining)	# Total
Private Sale	80,000,000	20,000,000	0	0	0		100,000,000
Public Sale	150,000,000	0	0 0		0		150,000,000
Staking Rewards Pool	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000		150,000,000
Liquidity Mining Rewards	10,500,000	16,500,000	22,500,000	24,000,000	24,000,000	2,500,000	100,000,000
Partner Mining Rewards	12,000,000	12,000,000	12,000,000	12,000,000	2,000,000		50,000,000
Team & Advisors	0	50,000,000	50,000,000	50,000,000 0			100000000
Marketing & Community Pool	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000		50,000,000
Liquidity Reserve in Pool	60,000,000	10,000,000	10,000,000	10,000,000	10,000,000		100,000,000
Total (Annual)	352,500,000	148,500,000	134,500,000	86,000,000	76,000,000	2,500,000	800,000,000
Cumulative Supply	352,500,000	501,000,000	635,500,000	721,500,000	800,000,000		
Target Liquidity	100,000,000	125,000,000	150,000,000	175,000,000	200,000,000		
Community Liquidity Contribution	40,000,000	55,000,000	70,000,000	85,000,000	100,000,000		
Liquidity % of Circulating Supply	28.37%	24.95%	23.60%	24.26%	25.00%		

# 6.4 Benefits to the Ecosystem

The Liquidity Pool is a critical component of ThermAl's ecosystem, delivering the following benefits:

- Price Stability: By maintaining deep liquidity, the pool reduces the likelihood of extreme
  price fluctuations caused by large trades.
- Increased Accessibility: The availability of multiple trading pairs (e.g., THRM/MATIC, THRM/USDT) ensures flexibility for users and traders, enhancing the token's reach.
- **Community Trust:** Locking the initial liquidity for two years builds confidence among early investors and ensures stability during the critical growth phase.
- **Future Scalability:** As new trading pairs are added and additional liquidity is deployed, ThermAl will be positioned to scale seamlessly into larger markets and ecosystems.

### 6.5 Conclusion

ThermAl's Liquidity Pool ensures a stable and accessible trading environment for the **THRM token**. By aligning liquidity targets with token circulation and locking the initial liquidity automatically via DxSale, the project is committed to fostering long-term trust and sustainability. Future plans to expand liquidity across additional trading pairs, including potential collaborations with partner tokens like FLUX, will further enhance accessibility and support ThermAl's growth into a globally recognised ecosystem.

# 7. Staking and Reward Mechanisms

ThermAl will offer both flexible and fixed-term staking options, enabling users to earn rewards by contributing to the ecosystem:

# Flexible Staking:

- APY: 8%
- Lock-Up Period: None (users can withdraw at any time).
- Restaking Limit: Users cannot restake additional tokens within 48 hours of withdrawing from the flexible pool.
- Reward Payout: Weekly.
- Purpose: Encourages casual participation and provides liquidity to users.

# **Fixed-Term Staking Options:**

Staking Duration	% APY	Token Penalty (Early Withdrawal)	Rewards Forfeiture (Early Withdrawal)
30 Days	10%	<b>5%</b> of staked tokens	100% of rewards forfeited
90 Days	12%	<b>5%</b> (0-30 Days) <b>4%</b> (31-90 Days)	<b>100%</b> (0-30 Days) <b>50%</b> (31-90 Days)
180 Days	15%	<b>5%</b> (0-30 Days) <b>4%</b> (31-90 Days) <b>2%</b> (91-180 Days)	100% (0-30 Days) 50% (31-90 Days) 25% (91-180 Days)

### **Penalty Distribution & Fees:**

- Penalties from early withdrawals are redistributed to the staking rewards pool, benefiting long-term stakers.
- There will be fees associated with all staking pools. These are detailed in a future section and will help ThermAl Node development and be reinvested into the staking pools.

## **Program Duration and Continuation:**

- The staking program is designed to run for an initial duration of **5 years**, utilising the reserved staking rewards pool.
- After the 5-year period, staking rewards will continue to be funded through transaction fees generated within the ecosystem and profits from ThermAl Nodes.
- This ensures that staking remains a core feature of the ThermAl ecosystem, promoting ongoing participation and engagement beyond the initial allocation period.
- Rewards are distributed weekly to encourage consistent engagement.
- The flexible reserve and/or buybacks from profits may be used to fund the pool after the 5 year initial duration.

### Minimum Staking Eligibility:

A minimum of 25,000 THRM tokens is required to participate in fixed-term staking. There
is no minimum for flexible staking. This threshold may be adjusted in the future based on
community feedback and ecosystem needs.

#### Multiple Pool Staking:

- Users can stake in multiple pools simultaneously. The minimum stake applies individually to each pool and is not cumulative across multiple pools.
- Users may also make multiple stakes within the same pool, allowing staggered lock-up periods. For example:
  - Stake 1,000 THRM in a 30-day pool.
  - Stake another 1,000 THRM in the same pool 15 days later, resulting in separate withdrawal dates (Day 31 and Day 45).
- Your first stake must meet the minimum stake subsequent stakes do not have a minimum.

# 8. Liquidity Mining Pool

# 8.1 Overview

ThermAl's Liquidity Mining Pool will be designed to reward community members who provide liquidity (**THRM** plus a paired asset) on decentralised exchanges. By contributing to these liquidity pools, participants (Liquidity Providers, or "LPs") help:

- Stabilise Market Depth: Ensuring healthy order books and reducing price volatility.
- Minimise Slippage: Allowing users to trade larger amounts of THRM without significant price impact.
- **Foster Long-Term Growth:** Encouraging a vibrant ecosystem where new entrants can easily buy or sell **THRM**.

In return for locking their tokens in the pool, LPs earn two types of rewards:

- 1. **DEX Trading Fees:** LPs receive a share of the trading fees (typically 0.3% per trade) collected by the decentralised exchange for swaps involving the **THRM** pair.
- 2. **Liquidity Mining Rewards:** In addition to trading fees, LPs earn **THRM tokens** from the Liquidity Mining Pool as compensation for supporting the ecosystem.

**Impermanent Loss Note:** As with any decentralised exchange liquidity provision, **impermanent loss** can occur if the prices of the two assets diverge significantly. LPs should understand this risk before participating.

#### 8.2 Reward Structure and Rationale

ThermAl has allocated **100 million THRM** over five years for liquidity mining rewards. This distribution schedule was developed to align with the **Tokenomics and Liquidity Table** outlined in **Section 6: Liquidity Pool** of this whitepaper.

The table provides the following critical insights:

- Cumulative Supply Growth: By Year 5, circulating supply is projected to reach 800 million THRM.
- Target Liquidity: Each year's liquidity target was determined as a percentage of the cumulative supply, ensuring sufficient liquidity depth to stabilise the token's price.
- **Community Contribution:** After factoring in ThermAl's own liquidity reserve contributions, the remaining liquidity must come from community LPs, forming the basis for annual reward allocations.

These insights informed the reward schedule to achieve two primary goals:

- 1. **Competitive Yields (25–35% APY):** Rewards are calibrated to provide attractive returns for LPs while maintaining sustainability.
- Steady Liquidity Growth: Increasing rewards over time ensures liquidity grows proportionally with the token's circulating supply and market demand

Locked Initial Liquidity: To build trust with the community, initial liquidity from

DxSale will be locked for 2 years. This ensures a stable foundation for trading and

protects against sudden liquidity withdrawals

# 8.3 Dynamic APY System

ThermAl will employ a **Dynamic APY System** to balance liquidity needs with fixed annual reward allocations. The system adjusts the effective APY based on actual liquidity provided by the community, ensuring that rewards remain competitive and proportional to participation.

#### **How it Works**

The **Annual Rewards** for each year are fixed, but the actual APY depends on the total liquidity contributed by the community. If liquidity is below target, the APY rises to attract more deposits. If liquidity is above target, the APY falls to prevent over-distribution.

#### Where:

- Annual Rewards: The fixed **THRM** allocated for liquidity mining each year (e.g., 10.5M THRM in Year 1).
- Total Liquidity in Pool: The combined value of THRM and the paired asset provided by LPs.

# **Key Adjustments**

- **Undersubscribed Pool:** If total liquidity is below the **Target Liquidity** (e.g., 40M THRM in Year 1), the APY rises because fewer participants share the fixed rewards.
- Oversubscribed Pool: If total liquidity exceeds the Target Liquidity, the APY decreases as more participants share the same rewards.

#### **Monthly Distribution and Bonus Rewards**

- Scheduled Monthly Rewards: The total 100M THRM is divided into monthly allocations over 60 months (5 years), in half-year "blocks" that step up the monthly rate. Rewards are calculated daily (via snapshots of each user's share in the pool) but paid out monthly to reduce network fees and simplify distribution.
- Daily Snapshots: We currently plan to take a once-per-day snapshot at a fixed time (00:00 UTC), though we may refine this approach based on community feedback and technical advice.
- 2.5M Bonus Allocation: On top of the monthly schedule, 2.5 million THRM is reserved
  for bonus rewards. These tokens can be distributed at the team's discretion to incentivise
  top contributors, support special promotions, or strategically deepen liquidity at key
  moments.

# **Liquidity Mining Reward Schedule**

Period	Months	# Monthly Reward (M THRM)	Half-Year Total (M)	Cumulative Total (M)
H1	1–6	0.75	4.5	4.5
H2	7–12	1	6	10.5
Н3	13–18	1.25	7.5	18
H4	19–24	1.5	9	27
H5	25–30	1.75	10.5	37.5
H6	31–36	2	12	49.5
H7	37–42	2	12	61.5
Н8	43–48	2	12	73.5
H9	49–54	2	12	85.5
H10	55–60	2	12	97.5

# 8.4 Participation Requirements and Withdrawal Policy

### **Minimum Participation Threshold**

 Minimum Stake: To qualify for liquidity mining rewards, participants must provide a minimum of 25,000 THRM in liquidity.

#### **Rolling Lock-Up Period**

- 30-Day Lock-Up: Liquidity provided to the pool must remain locked for a minimum of 30 days to qualify for rewards.
- This lock-up period rolls forward with any additional deposits, resetting the timer.

## **Early Withdrawal Policy**

- No Penalty Fees: Participants can withdraw liquidity at any time without incurring penalty
- Fees: There will be a flat 0.5% unstaking fee as detailed in a future section. This will be used for ThermAl Node Development and reinvestment into the reward pools
- **Forfeiture of Rewards:** Early withdrawal before completing the 30-day rolling lock-up results in forfeiture of all accrued rewards.

# 8.5 Discretionary Bonus Rewards

The **2.5M THRM** bonus allocation is reserved for strategic use. Possible applications include:

- **Top Miner Incentives:** Rewarding the highest-contributing LPs.
- Liquidity Campaigns: Short-term APY boosts during high-demand periods.
- Community Engagement: Contests, referral rewards, or other marketing initiatives.

# 8.6 Future Expansion to Other Pairs

While the initial liquidity will focus on a specific DEX pair (e.g., **THRM/MATIC**), ThermAl plans to expand to other pairs such as **THRM/USDT** or partner tokens like **FLUX**. If multiple liquidity pools operate concurrently, the total rewards could be split among them, or additional incentives may be introduced to balance liquidity across pairs. Further details on multi-DEX support or alternate trading pairs will be announced as the project evolves.

### 8.7 Conclusion

ThermAl's Liquidity Mining Pool is closely aligned with the **Tokenomics and Liquidity Table** in Section 6, ensuring that rewards, community liquidity targets, and APY remain sustainable over the long term. By dynamically adjusting APY, locking the initial DxSale liquidity for two years, and

offering dual rewards (trading fees and liquidity mining incentives), ThermAl fosters a stable and vibrant ecosystem—one in which liquidity providers can meaningfully benefit while contributing to the token's growth and price stability.

# 9. Partner Mining Rewards Pool

# 9.1 Overview

The Partner Mining Rewards Pool is a program designed to reward miners of 'Official Partner Coins' (Currently: Flux, Dynex & Ravencoin) for both their mining contributions and their support of the ThermAl ecosystem through staking ThermAl tokens (THRM). It provides a clear incentive to stake THRM tokens while continuing to mine partner coins, creating a dual benefit for participants:

### Earn THRM Rewards proportional to:

- The USD value of partner coins you mine.
- The amount of **THRM tokens** you stake (calculated daily).

**Early Access to Exclusive Future Opportunities**, such as the ThermAl Nodes Profit Pool, for participants who actively stake and mine.

This mechanism benefits both miners and ThermAl by:

- Strengthening official partner networks that **ThermAl Nodes** will mine in the future.
- Reducing THRM token circulation through increased staking.
- Driving demand for **THRM tokens**, which creates price support.

# 9.2 Minimum Stake Requirement

To ensure meaningful participation and alignment with the ecosystem's goals, a minimum stake of **25,000 THRM** is required to join the Partner Mining Rewards Pool.

- Users who stake below this threshold are not eligible to earn rewards.
- This ensures rewards go to participants who are actively contributing to the ecosystem through significant staking.

# 9.3 Daily Average Staking Calculation

To prevent users from staking large amounts at the last minute and unfairly taking a disproportionate share of rewards, the pool calculates a **daily average staking balance** for each user. This ensures fairness across the entire reward period.

#### How it works:

- At the end of each day, the system records each user's staked balance.
- At the end of the month, the system calculates the daily average balance for each user, which is used in the reward calculations.

# 9.4 Why Join the Partner Mining Rewards Pool?

The pool is designed to offer unique advantages to miners of existing POW coins who stake **THRM tokens**. Here's why it stands out:

### **Earn More Than Just Mining Partner Coins**

- By mining partner coins (Flux, Dynex, RVN), you already earn rewards from those networks.
- Joining this pool allows you to increase your earning potential by also receiving bonus
   THRM tokens for your efforts.

#### **Amplify Rewards Through Staking**

- Staking **THRM** boosts your mining rewards via a logarithmic multiplier.
- The more you stake, the more your mining rewards are amplified—though diminishing returns ensure fairness for smaller participants and avoid whale domination.

# **Access to Future ThermAl Opportunities**

- Participants in this pool will receive preferential access to the ThermAl Nodes Profit Pool.
   This pool will distribute profits from ThermAl Nodes, which combine computational tasks with heat generation.
- Only those who participate in the Partner Mining Rewards Pool will have first access or receive multipliers in future ThermAl initiatives.

### Support Partner Ecosystems and ThermAl's Long-Term Success

- Mining more partner coins directly supports their networks, improving the value and profitability of those coins.
- When ThermAl Nodes go live, they will mine these partner coins, benefiting from their strengthened value. This will increase ThermAl's profits, which will in turn enable larger

distributions back into the **ThermAl Nodes Profit Pool**, rewarding participants even further.

### 9.5 How It Works

This reward distribution mechanism will be designed to be transparent and fair. Participants will be rewarded based on their mining contributions (measured in USD value mined) and their staking activity (calculated as the daily average **THRM** staked). Additionally, participants earn a **fixed 8% APY** on their staked **THRM tokens**, which is paid from the normal staking reserves.

## **Step 1: Mining Contribution**

Rewards are based on the USD value of the partner coins you mine during the reward period (e.g., one month). Your Base Reward is calculated as:

**Base Reward** = (USD Value Mined by User ÷ Total USD Value Mined by All Users) × Monthly Reward Pool

#### Where:

- **USD Value Mined by User** = The total USD value of partner coins mined by a specific user
- Total USD Value Mined by All Users = The combined USD value mined by all participants in the reward pool.
- Monthly Reward Pool = The total reward allocation for the month (1,000,000 THRM).

### Step 2: Staking Multiplier

Participants can increase their rewards by staking **THRM tokens**. The multiplier grows logarithmically for stakes above 25,000 THRM, ensuring fairness and diminishing returns for larger stakes.

- If staked amount ≤ 25,000 THRM: Multiplier = 1
- If staked amount > 25,000 THRM: **Multiplier** = 1 + log10(1 + (Staked Amount ÷ 25,000))

### **Step 3: Adjusted Rewards**

The Adjusted Reward for each user incorporates the staking multiplier into their Base Reward:

Adjusted Reward = Base Reward × Multiplier

#### Step 4: Normalisation

To ensure the total rewards distributed match the monthly reward pool, all Adjusted Rewards are normalised:

Final Reward = (Adjusted Reward ÷ Total Adjusted Rewards of All Users) × Monthly Reward Pool

# 9.6 Duration of the Pool

The Partner Mining Rewards Pool will run for **50 months**, distributing a total of **50,000,000 THRM tokens**. Each month, **1,000,000 THRM** will be allocated. At the end of the **50-month period**, the program's performance will be reviewed to determine whether to extend, modify, or conclude the pool.

Total Pool Allocation: 50,000,000 THRM
Monthly Rewards Cap: 1,000,000 THRM

# 9.7 Worked Example

#### Scenario

• Monthly Reward Pool: 1,000,000 THRM

• Minimum Stake: 25,000 THRM

• Users and Contributions:

User	USD Mined (\$)	Daily Average Staked THRM
User A	\$50	25,000
User B	\$50	50,000
User C	\$50	100,000
User D	\$50	500,000

### **Step-by-Step Calculation:**

### **Base Rewards:**

- All users mined \$50, and the total mined is \$200.
- Base Reward = (\$50 ÷ \$200) × 1,000,000 = 250,000 THRM.

### Multipliers:

- User A: Staked 25,000 THRM → Multiplier = 1.
- User B: Staked 50,000 THRM  $\rightarrow$  Multiplier = 1 + log10(1 + (50,000  $\div$  25,000)) = 1.30.
- User C: Staked 100,000 THRM → Multiplier = 1 + log10(1 + (100,000 ÷ 25,000)) = 1.60.
- User D: Staked 500,000 THRM  $\rightarrow$  Multiplier = 1 + log10(1 + (500,000  $\div$  25,000)) = 2.00.

#### **Adjusted Rewards:**

- User A: 250,000 × 1 = 250,000 THRM.
- User B: 250,000 × 1.30 = 325,000 THRM.
- User C: 250,000 × 1.60 = 400,000 THRM.
- User D: 250,000 × 2.00 = 500,000 THRM.

### Normalisation:

- Total Adjusted Rewards = 250,000 + 325,000 + 400,000 + 500,000 = 1,475,000.
- Final Rewards:
  - User A: (250,000 ÷ 1,475,000) × 1,000,000 = 169,492 THRM.
  - User B: (325,000 ÷ 1,475,000) × 1,000,000 = 220,338 THRM.
  - User C: (400,000 ÷ 1,475,000) × 1,000,000 = 271,186 THRM.
  - User D: (500,000 ÷ 1,475,000) × 1,000,000 = 338,983 THRM.

# 9.8 Future Benefits

By participating in this pool, users gain preferential access to the **ThermAl Nodes Profit Pool**, ensuring long-term rewards tied to the success of **ThermAl Nodes**. Additionally, participants benefit from priority inclusion in beta testing for new ThermAl initiatives and the potential for enhanced staking multipliers in upcoming reward programs. This ensures that early adopters and committed supporters gain additional advantages as the ThermAl ecosystem grows.

# 10. ThermAl Nodes & Profit Pool

### 10.1 Overview

The **ThermAl Profit Pool** is a planned mechanism to distribute a share of the profits generated by **ThermAl Nodes** back to the community. These Nodes will mine cryptocurrency and perform **Proof of Useful Work (PoUW)** using the **ThermAl Nodes**, which are engineered to provide both heating to the property and computing capabilities. This feature will officially launch once the development and deployment of the heaters are complete, ensuring the necessary infrastructure is established for transparent and sustainable rewards.

# 10.2 Planned Mechanics

#### **Revenue Generation**

- POW, PoUW & Decentralised Storage: ThermAl Nodes will perform POW & PoUW
  Tasks (Mining) for partner projects. By utilising the heat generated for practical processing
  tasks, ThermAl Nodes turn typical energy expenditure into valuable heat for the property
  as well as generating revenue for the ecosystem.
- ThermAl Nodes will have a large amount of storage built into them. This will be made available to decentrailised storage projects in return for a fee. This additional revenue stream is low power and runs in the background without affecting the normal POW/PoUW. This will help increase overall income when there is a low heat requirement and limited excess solar or off peak tariffs. There are multiple projects we are looking to partner with including Filecoin & Storj.
- Service Fees & Partnerships: Over time, additional revenue sources—such as Al services and collaborations with partner projects—will contribute to the Profit Pool.

### **Profit Allocation**

- Profit Pool Contribution: A portion of the revenue from the ThermAl Nodes will be allocated to the Profit Pool. This allocation is designed to balance operational costs, future development, and meaningful community rewards.
- **Scalability**: As more **ThermAl Nodes** are deployed and computation demand increases, the overall size of the Profit Pool will grow in tandem, creating a positive feedback loop that helps drive further expansion.

# **Distribution Model**

- **Eligibility**: Once live, the Profit Pool will distribute rewards to community members who meet specific criteria—for example, holding or staking **ThermAl Tokens**.
- **Transparency**: All distributions will be executed on-chain, ensuring that participants can verify reward amounts and track the pool's growth in real time.

# 10.3 Enhancing Participation and Engagement

Ensuring long-term engagement and participation within the ThermAI ecosystem is essential for its success. The Profit Pool mechanism is designed not only to reward users financially but also to create a thriving and active community that continuously contributes to the platform's development and adoption.

#### **Incentive Alignment**

By linking rewards directly to ThermAl's operational success, token holders, stakers, and
miners are incentivised to support and expand the ecosystem actively. The more ThermAl
Nodes deployed and utilised for mining or PoUW tasks, the greater the revenue
contribution to the Profit Pool, reinforcing a cyclical growth model.

# **Community Engagement Strategies**

- ThermAl will manage the Profit Pool through a structured approach, ensuring that reward distributions and reinvestments are strategically aligned with long-term project goals. The ThermAl team will oversee adjustments to reward structures, reinvestments, and expansion plans based on ecosystem performance, market conditions, and technical advancements.
- Educational initiatives, webinars, and community-driven proposals will be encouraged, ensuring users are informed and engaged with the project's roadmap and advancements.

## Long-Term Growth and Stability

- As the Profit Pool grows in value, the rewards distributed to participants will increase
  proportionally. This dynamic encourages long-term holding and staking of **THRM tokens**,
  reducing token sell pressure while increasing the sustainability of the ecosystem.
- Strategic partnerships with blockchain networks such as Flux, Dynex, and Ravencoin will
  further bolster engagement by offering cross-platform rewards and potential integrations.
- By fostering a highly engaged and incentivised community, ThermAl ensures that
  participation remains high, reinforcing the ecosystem's sustainability and long-term
  success. These strategies will evolve in collaboration with the ThermAl community,
  ensuring that new features align with user needs and market trends.
- **Incentive Alignment**: By linking rewards to the platform's operational success, ThermAl encourages users to support and expand the ecosystem.
- **Long-Term Engagement**: As the Profit Pool grows, participants benefit from remaining active within the network.

### 10.4 Future Innovations

- Mineable Coin for PoUW: ThermAl aims to explore the development of its own mineable coin specifically programmed for PoUW tasks while generating useful heat. This approach inverts typical efficiency requirements by harnessing the heat as an asset rather than a by-product.
- Partner Coin Rewards: Alongside THRM tokens, stakers may have the option to earn additional rewards paid out directly in partner coins that ThermAl Nodes have mined or

- swap their **THRM token rewards** for partner coins. This allows participants to diversify their earnings and benefit from the multi-coin mining capabilities of the ecosystem.
- Liquidity Pools: There is scope to create liquidity pools involving both mined coins and THRM tokens, offering users further opportunities to earn, trade, and contribute to the overall liquidity of the ecosystem. These liquidity pools will play a crucial role in enhancing token stability, reducing market volatility, and encouraging long-term participation. Furthermore, liquidity pools will make it easier for new users to enter and exit positions without significant price impact, enhancing accessibility and long-term sustainability.
- Community Input: These concepts will evolve in collaboration with the ThermAl community, ensuring that new features align with user needs and market trends.
- Decentralised Marketplace: Enabling users to rent individual ThermAl Nodes for computational tasks or cryptocurrency mining. This system would provide flexibility for those who need access to GPU or Al processing power without investing in hardware. Renters could leverage ThermAl Nodes to mine various cryptocurrencies, conduct Proof of Useful Work (PoUW) tasks, or support Al-driven applications. This marketplace would enhance the ecosystem's liquidity by allowing node renters to generate passive income while maximising utilisation rates. Additionally, it would encourage broader participation from individuals and businesses seeking affordable and decentralised computing solutions. We would look to partner with Ravencoin to create NFTs for each node that could track the ownership of rental rights.
- Node-specific staking: ThermAl plans to introduce node-specific staking, allowing users to stake against a particular node or group of nodes to earn a higher percentage of the mining rewards generated by those specific nodes. This approach moves beyond a collective staking pool and introduces a competitive element where users can strategically allocate their stakes to nodes that they believe will generate the highest returns. Again there is a potential partnership with RVN to create NFTs to track ownership rights to their stakes.
- Gamification: By enabling node-specific staking, ThermAl fosters a more dynamic and
  engaging ecosystem. Users can monitor performance metrics of different nodes, track
  leaderboards, and adjust their staking positions based on mining efficiency and profitability.
  This gamified approach encourages participation, enhances liquidity, and rewards those
  who actively engage with the ecosystem.
- Leaderboards: Will highlight top-performing nodes and stakers, driving further engagement by creating incentives for users to optimise their staking strategies. This feature promotes long-term commitment and ecosystem growth by making staking not just a passive activity but an interactive and strategic component of the ThermAI network.

## 10.5 Conclusion

Node development and deployment, including thorough testing of mining performance and PoUW functionality. Community updates will be provided as milestones are achieved, with full details on distribution percentages, eligibility, and additional reward structures shared closer to the launch date.

It is anticipated that development and first trial of the **ThermAl Nodes** will take 12-18 months post public sale. With wider deployments in year 2.

The ThermAl network presents unlimited development potential. The infrastructure laid down by the deployment of **ThermAl Nodes** can be utilised for countless future applications beyond mining and PoUW. The ThermAl team will actively encourage community-driven innovation, ensuring that as new ideas emerge, they can be explored and implemented. Once the hardware infrastructure is in place, it can support a broad range of computational projects, from Al processing to scientific research and beyond, fostering an ecosystem that evolves with technological advancements and community contributions.

# 11. Sustainability and Social Value

# 11.1 Reducing Energy Waste and Enhancing Sustainability

**ThermAl Nodes** are designed to address one of the key inefficiencies in modern computation - excess heat. Traditional operations and centralised data centres consume vast amounts of electricity, generating heat as a byproduct that is often wasted. ThermAl's technology repurposes this otherwise lost energy by integrating computing hardware directly into domestic heating systems.

By utilising **renewable energy sources** such as solar and flexible grid tariffs, **ThermAl Nodes** can reduce reliance on fossil-fuel-based power, making mining operations more sustainable. The ability to tap into decentralised energy sources ensures that ThermAl mining can operate efficiently while reducing strain on traditional electricity grids.

Additionally, **ThermAl Nodes** offer an **alternative to centralised data centres**, which are often reliant on non-renewable energy and contribute to significant carbon emissions. By decentralising computation and distributing mining power across a network of small-scale, home-based nodes, ThermAl mitigates the need for large-scale facilities that consume disproportionate amounts of power and resources.

# 11.2 Social Impact: Addressing Fuel Poverty

One of ThermAl's core missions is to provide **tangible social value** to vulnerable communities affected by fuel poverty. In many households, heating costs represent a significant financial burden, particularly in lower-income and social housing sectors. By integrating **ThermAl Nodes** into homes, these units **convert computational power into usable heat**, effectively subsidising heating costs for households that need it the most.

ThermAl will work with local councils, housing associations, and social impact programs to deploy its technology where it can have the greatest effect. By reducing heating expenses, households can free up income for other essential needs, improving overall well-being and quality of life.

Moreover, ThermAl's model ensures that social value is built into its economic structure, creating a **win-win scenario** where computational tasks drive both financial returns and measurable community benefits. As the network grows, its impact scales proportionally, offering an innovative way to combine technological advancements with meaningful, real-world improvements.

Through these efforts, ThermAI not only pioneers sustainable mining but also leverages blockchain technology for the **greater social good**, ensuring that innovation drives both environmental responsibility and tangible economic relief for those most in need.

# 12. Fees

# 12.1 Introduction

ThermAl's fee model is designed to balance sustainability, encourage long-term participation, and support ongoing development. Unless otherwise noted, all fees are split 80/20. This applies to staking, mining, and claim fees, while transaction and wallet transfer fees are allocated entirely to the Treasury.

- 80% goes to the Treasury for ThermAl Node development and operational costs
- 20% goes back into reward pools (staking, mining) for longevity and sustainability.

**Note**: Once **ThermAl Nodes** are launched, we anticipate adjusting certain fees so that a portion of these funds directly replenishes the staking reward pools, further ensuring long-term stability.

# 12.2 Transaction & Wallet Fees

1. Buy Transactions: 2%

2. Sell Transactions: 4%

3. Wallet-to-Wallet Transfers

○ Sending: 0.5%

o Receiving: 0.1%

100% of transaction and wallet fees are allocated to the Treasury for **ThermAl Node** development and operational costs. Over time, a portion may be redirected to bolster reward pools once **ThermAl Nodes** launch and are generating their own income.

# 12.3 Staking & Reward Fees

#### Minimum Claim Threshold

• **500 THRM** minimum claim for Flexible, Fixed, Liquidity, and Partner Mining rewards.

# Claim / Payout Fees

• Flexible Staking Claim: 1%

• Fixed Staking Claim: 0.5%

• Liquidity Mining Claim: 0.5%

Partner Mining Reward Payout: 0.5%

These fees are deducted at the moment of claiming or payout. They are split 80/20 between the Treasury and the reward pools to sustain APYs.

# 12.4 Unstaking Fees

# **Liquidity Mining**

• 0.5% Flat Fee when removing liquidity from ThermAl's liquidity pools.

### **Partner Mining Rewards**

• **0.5% Flat Fee** on partner mining reward withdrawals.

These fees discourage frequent in-and-out behaviour by making short-term withdrawals less profitable, ensuring that liquidity remains stable and supporting long-term sustainability for the ecosystem. They are also split 80/20—80% to the Treasury and 20% to the reward pools.

# 12.5 Flexible Staking Fee Schedule

ThermAl's Flexible Staking allows unstaking at any time, with a time-based fee reduction:

Time in Pool	Unstake to Wallet (No Lock-Up)	Unstake to Wallet (If Transferred from Fixed Pool – 7-Day Lock- Up)	Move to Fixed or Other Reward Pool
<30 Days	1%	0%	0%
30-90 Days	0.75%	0%	0%
90-180 Days	0.50%	0%	0%
180+ Days	0.25%	0%	0%

**No additional lock-up** if you originally staked directly into **Flexible**.

- If tokens moved from a Fixed Pool to Flexible, there is a 7-day lock-up before you can unstake to a wallet, but no extra fee beyond what is shown above.
- Moving from Flexible → Fixed or another reward pool is fee-free to encourage ongoing participation.

# 12.6 Fixed Staking Fee Schedule

ThermAl offers **30**, **90**, and **180-day Fixed-Term** staking pools with **higher APYs** compared to Flexible Staking, rewarding users with greater returns for longer commitment periods. The following fees apply at the end of each term (or if re-staking/transitioning to flexible):

Fixed Pool	Unstake to Wallet	%	Restake (Same or Different Fixed Pool)	Move to Flexible Pool (7- Day Lock-Up)
30-Day	1%		0%	0.75%
90-Day	0.75%		0%	0.50%
180-Day	0.50%		0%	0.25%

**No Fee for Restaking**: Moving directly from one fixed-term pool to another fixed-term pool is **fee-free** to encourage continued participation.

- Moving to Flexible Staking imposes the specified fee plus a 7-day lock-up.
- Early Withdrawals from Fixed Staking have extra token penalties (see next section).

# 12.7 Early Withdrawal Penalties (Fixed Staking)

If a user unstakes before the fixed term completes, an additional token penalty applies on top of unstaking fees. The penalty is taken from staked tokens and ensures pool stability.

Staking Duration	% APY	Token Penalty (Early Withdrawal)	Rewards Forfeiture (Early Withdrawal)
30 Days	10%	<b>5</b> % of staked tokens	100% of rewards forfeited
90 Days	12%	<b>5%</b> (0-30 Days) <b>4%</b> (31-90 Days)	<b>100</b> % (0-30 Days) <b>50</b> % (31-90 Days)
180 Days	15%	<b>5%</b> (0-30 Days) <b>4%</b> (31-90 Days) <b>2%</b> (91-180 Days)	<b>100%</b> (0-30 Days) <b>50%</b> (31-90 Days) <b>25%</b> (91-180 Days)

# 12.8 Summary

ThermAl's fee structure is designed to provide long-term sustainability while maintaining fairness and flexibility for users. Key benefits include:

- **Encouraging long-term staking**: Reduced fees over time and strong APYs incentivise users to commit to longer staking periods.
- **Ensuring reward pool sustainability**: A portion of fees is reinvested into the ecosystem, maintaining stable rewards for participants.
- Funding ongoing development: Treasury allocations support the expansion and deployment of ThermAl Nodes, ensuring continuous project growth.
- Balancing flexibility and sustainability: Users can choose between fixed-term and flexible staking options while avoiding excessive short-term trading behavior.
- **Preventing liquidity drain**: Fee structures discourage frequent in-and-out transactions, stabilising liquidity and securing long-term staking incentives.

# 13. Future Innovation

# 13.1 Expanding the ThermAl Ecosystem

As ThermAl continues to develop, we aim to explore opportunities for further expansion, both within the blockchain space and in the real-world application of decentralised computing and sustainable energy solutions. These efforts will focus on:

- Enhancing the THRM token utility.
- Developing a Proof of Useful Work (PoUW) blockchain.
- Exploring roles for community validator nodes.
- Strengthening partnerships within the Web3 ecosystem.
- Scaling ThermAl Nodes for broader adoption.

# 13.2 ThermAl Proof of Useful Work

### The Need for a ThermAl-Specific PoUW Blockchain

ThermAl's development strategy heavily relies on partner projects for both computational support and profitable mining opportunities. **We want to be clear: our goal is not to replace these partnerships but to enhance our ecosystem with a complementary blockchain.** 

The primary reason for developing our own Proof of Useful Work (PoUW) blockchain is to optimise **ThermAl Nodes** for a unique mining and heat-generation balance. Unlike most projects that focus on minimising heat output and power consumption, ThermAl requires the opposite—we need to maximise heat production while maintaining computational utility.

To achieve this, we propose a dedicated ThermAl blockchain, potentially built using **Polygon CDK** or on the **FLUX Network**, to ensure full compatibility with the **THRM token** and streamline blockchain development. This custom approach will allow us to:

- Fine-tune mining algorithms to prioritise heat generation efficiency while maintaining computational output.
- Enable a dynamic workload system that adjusts GPU resources in real-time, shifting between PoUW tasks and direct heat generation based on operational needs.
- Maintain compatibility with partner projects, allowing ThermAl Nodes to mine established PoUW networks such as Flux and Dynex, ensuring efficient and profitable mining opportunities when they align with ThermAl's operational objectives.

### **Unique Approach: Balancing Compute Power & Heat**

**ThermAl Nodes** will primarily utilise older-generation and lower-performance GPUs to keep costs low while maximising thermal output. This means our blockchain will focus on less computationally intensive tasks, catering to workloads that align with the strengths of our hardware.

Unlike other PoUW projects, ThermAl's approach aims to:

- Prioritise heat generation as the primary outcome, with computation as a secondary function.
- Allow seamless fallback to external PoUW chains, enabling nodes to mine partner coins when higher efficiency is required.
- Introduce a flexible mining strategy, where nodes adjust their workload to optimise either profitability or heat production based on real-time conditions.

### 13.3 Introduction of a New PoUW Coin

As part of this expansion, ThermAl would introduce a new mineable PoUW coin. This coin will:

- Act as the native gas token for the ThermAl blockchain.
- Maintain a 1:1 swap ratio with THRM, ensuring liquidity and seamless integration within
  the existing ThermAl ecosystem. If adjustments are required in the future, alternative
  models such as a dynamic swap ratio based on market demand or a tiered exchange
  system may be explored to maintain stability and usability.
- Tie mining rewards both computational utility and heat generation efficiency.

The new coin will complement **THRM** rather than replace it, ensuring that ThermAl remains accessible to both token holders and computational contributors.

### 13.4 ThermAl Validator Nodes

As part of ThermAl's long-term vision, we will introduce a **community-driven validator system** to enhance the security and decentralisation of the ThermAl blockchain.

Unlike **ThermAl Nodes**, which focus on **Proof-of-Useful-Work (PoUW) mining** and heat generation, validators will play a crucial role in securing transactions and maintaining network stability. This system allows broader participation in the ecosystem **without requiring high-performance hardware**.

#### **How Validators Work**

Validators confirm transactions and safeguard the blockchain, ensuring the network remains **decentralised, secure, and efficient**. Community members will be able to operate validator nodes using **low-cost, energy-efficient devices** such as a Raspberry Pi, home server, or VPS.

To participate, validators must stake THRM tokens as collateral. In return, they will earn block rewards and transaction fees as compensation for their role in maintaining the network.

#### Why Are Validators Needed?

- Enhanced Network Security Validators ensure transactions are processed correctly and efficiently.
- Encouraging Decentralisation Open participation prevents network centralisation by a few entities.
- **Low-Cost Entry** Unlike PoUW mining, validators won't require GPUs or high-power systems, making it accessible to more users.

### Benefits of Running a Validator Node

• **Earn Passive THRM Rewards** – Validators receive regular block rewards and a share of transaction fees.

- Minimal Hardware Requirements Nodes can operate on low-cost devices, reducing financial and technical barriers.
- Strengthen the ThermAl Ecosystem Validators play a key role in ensuring blockchain stability and decentralisation.

This validator system aligns with ThermAl's goal of fostering **broad participation**, **security**, **and scalability**, ensuring a robust and efficient blockchain ecosystem.

# 13.5 Partnership and Ecosystem Growth

#### **Collaborating with Existing PoUW Networks**

ThermAl's PoUW blockchain will not compete directly with existing PoUW-based projects like Flux and Dynex. Instead, our system will complement these networks by:

- Targeting a distinct market segment that prioritises heat generation alongside computational work.
- Exploring integration possibilities to leverage existing PoUW networks.
- Strengthening partnerships within the blockchain and AI compute industries.

### **Expanding ThermAl Nodes to Broader Markets**

Currently, **ThermAl Nodes** are designed primarily for social housing and renewable energy-powered homes. As we expand, we will develop a structured transition strategy to scale into private residential and commercial markets. This will involve navigating regulatory frameworks, securing compliance approvals, and identifying financial incentives that support adoption. Additionally, partnerships with government initiatives and energy providers will be explored to accelerate deployment and integrate ThermAl Nodes into existing energy infrastructures. Future expansion will explore:

- Scaling ThermAl Nodes for private residential and commercial adoption.
- Integrating with smart grid technology to optimise renewable energy utilisation.
- Exploring international markets where decentralised heating solutions are in high demand.
- Explore commercial building opportunities like swimming pool heating or factories with large solar arrays. A feasibility study will be conducted to evaluate the economic and technical viability of these applications, ensuring optimal integration with ThermAl Nodes and identifying potential return on investment for commercial partners.

# 13.6 Collaboration & Development

This future expansion would represent a significant milestone for ThermAl. To successfully implement PoUW and expand validator roles, we will seek collaboration from:

- Blockchain developers to refine the hybrid validator model.
- Al and compute specialists to optimise useful computational tasks.
- **Ecosystem partners** to explore integration with existing Web3 infrastructures.

We invite industry experts and community members to contribute their insights as we develop a sustainable, impactful blockchain ecosystem that aligns real-world utility with decentralised finance and green energy solution

# 14. Partnership Opportunities

# 14.1 Overview

ThermAl aims to build a robust and sustainable ecosystem by leveraging strategic partnerships across cryptocurrency, decentralised computing, and renewable energy sectors. These partnerships will enhance liquidity, expand **THRM's** real-world utility, and drive adoption for the ThermAl Token (**THRM**). This section outlines the key partnership opportunities that align with ThermAl's long-term vision.

# **14.2 Targeted Partners:**

**ThermAl Nodes** will provide both computational power and sustainable heating, making them an ideal fit for PoUW networks. By collaborating with decentralised computing platforms, ThermAl can extend its reach and offer additional incentives for miners and developers.

- Dynex (DNX): Potential integration with Dynex's neuromorphic computing network, allowing ThermAl Nodes to contribute to quantum decentralised computing. THRM staking incentives could be offered to Dynex miners who support ThermAl's infrastructure.
- Flux (FLUX): Exploring integration with Flux's decentralised cloud platform, enabling
   ThermAl Nodes to serve as computing infrastructure for Web3 applications. ThermAl
   Nodes could also act as Flux Nodes to support the network and increase revenue. Flux
   also offers ThermAl a platform to build its dApp and host its website among other things. A
   vital partnership.
- Ravencoin (RVN): The KawPoW algorithm used by Ravencoin generates a high amount
  of heat, making it an ideal fit for ThermAl Nodes. This synergy ensures that mining
  remains efficient while offering real-world use through sustainable heating. Additionally,
  ThermAl is exploring the potential of NFTs for ThermAl Node rental and trading, further
  integrating RVN blockchain functionality into the ecosystem.

# 14.3 Liquidity & DeFi Partnerships

Strong liquidity is critical for **THRM's** adoption and price stability. Collaborating with decentralised exchanges (DEXs), liquidity providers, and cross-chain protocols will ensure broader accessibility.

# **Targeted Partners:**

- Uniswap (DEX on Polygon): The primary liquidity pool (THRM/MATIC) will launch on Uniswap, with potential future expansion into THRM/USDC pools.
- Balancer & QuickSwap (Polygon DEXs): Exploring automated liquidity provisioning strategies and arbitrage incentives.
- Synapse Protocol (Cross-Chain Bridge): Expanding THRM's reach by bridging it to Ethereum, Avalanche, or BNB Chain.
- Decentralised Lending Platforms (Aave, QiDao): Integrating THRM into DeFi lending, allowing token holders to borrow against their THRM holdings.

# 14.4 Green Energy & Smart Grid Partnerships

ThermAl aligns with global decarbonisation goals by repurposing computational waste heat into household heating. Partnering with renewable energy providers and grid-balancing initiatives will enhance ThermAl's integration with energy markets.

### Targeted Partners:

- Octopus Energy (UK-based energy provider): ThermAl could integrate with Octopus' dynamic tariffs, optimising mining based on electricity pricing. However, integration may present challenges such as pricing fluctuations due to variable energy demand and potential regulatory hurdles around dynamic energy usage. Addressing these concerns through structured agreements and flexible mining algorithms will be critical. This partnership will be key to ensuring profitability and widescale adoption, as backing from Octopus could increase the willingness of large housing providers to trial ThermAl Nodes.
- Solar & Battery Storage Providers: Collaborations with companies like Sunsynk,
  GivEnergy, and MyEnergi to enhance ThermAl's ability to store and utilise renewable
  energy efficiently. A direct integration into a battery storage model would broaden product
  exposure and appeal.
- Grid Balancing Services: ThermAl Nodes could contribute to demand-side energy balancing, mining only when surplus renewable energy is available. There are instances when the grid has too much power and actually pays users to take this power from them. By having a large network of ThermAl Nodes available to turn on at press off a button, ThermAl could benefit from not only the free power but the payback from using the power from the grid as well. Octopus & other energy provider partnerships will be key to this proposal.

# 14.5 Hardware & Manufacturing Partnerships

Scaling up ThermAl's hardware production will require strategic alliances with technology providers, including GPU manufacturers and custom cooling solution providers.

# **Targeted Partners:**

- Overclockers UK or Watercooling UK: ThermAl will focus on partnerships with UK-based distributors such as Overclockers UK or Watercooling UK to ensure a streamlined supply chain for high-performance GPUs and hardware. Engaging with trusted regional distributors will enable ThermAl to scale efficiently while maintaining hardware availability and cost-effectiveness.
- EKWB (Cooling Solutions) or Alphacool: ThermAl aim to collaborate with EKWB or Alphacool, leading cooling solutions providers, to develop custom liquid cooling systems for ThermAl Nodes, ensuring optimal thermal efficiency for mining and heating applications.
- Industrial Manufacturing Partners: Collaborating with UK CNC manufacturers such as Protolabs and Hemlock Engineering, and PCB manufacturers like Eurocircuits and Newbury Electronics to bring production costs down while maintaining high-quality standards. Establishing relationships with reliable UK-based partners will ensure ThermAI can efficiently scale production, optimise logistics, and control component costs. These partnerships will help streamline the assembly of ThermAI Nodes, ensuring cost-effective yet high-performance hardware for mining and heating applications.

# 14.6 Community & Ecosystem Partnerships

A thriving community is essential to **THRM's** success. Engaging with blockchain influencers, developer communities, and decentralised organisations will accelerate adoption.

## **Targeted Partners:**

- Crypto Influencers & Content Creators: Expanding THRM's awareness in the blockchain and mining communities.
- NFT & Metaverse Projects: Exploring gamified incentives for ThermAl Node ownership using NFTs.
- Developer DAOs & Blockchain Academies: Partnering with Gitcoin, Polygon developer communities, and DAOs to promote THRM's adoption in DeFi and Web3 applications.

# 14.7 Conclusion & Next Steps

ThermAl's **THRM token** presents significant partnership opportunities across PoUW networks, DeFi, renewable energy, hardware manufacturing, and community engagement. By aligning with

strategic partners, **THRM** can unlock new levels of utility, liquidity, and adoption while advancing ThermAl's vision of sustainable, decentralised computation.

# **Next Steps:**

- Prioritise Strategic Alliances: Focus on integrations with Flux, Dynex, and Octopus Energy.
- 2. **DeFi Expansion:** Secure liquidity incentives and cross-chain expansion through key partnerships.
- 3. **Develop Outreach Strategy:** Establish a structured approach for technical collaborations and business development.
- 4. **Strengthen Community Engagement:** Leverage influencer marketing, developer grants, and DAO collaborations to boost **THRM** adoption.

By establishing these partnerships, ThermAl will solidify its position as a leader in sustainable blockchain infrastructure while driving innovation in decentralised computation and energy-efficient mining.

# 15. Marketing & Community Reserve

# 15.1 Overview

The **Marketing & Community Reserve** is a critical allocation within the ThermAl ecosystem, designed to drive brand awareness, user adoption, and long-term engagement. This fund ensures that the ThermAl Token (**THRM**) gains visibility among both crypto investors and real-world users of **ThermAl Nodes**, fostering a strong, sustainable community that actively participates in the ecosystem.

ThermAl's success depends on a well-executed marketing strategy that combines organic growth with targeted promotions. The **Marketing & Community Reserve** will be used strategically to incentivise participation, enhance outreach, and establish trust in the project.

# 15.2 Allocation Summary

Category	% Allocation (%)	Tokens Allocated	Purpose
Marketing Campaigns	30%	15,000,000 THRM	Paid advertising, influencer partnerships, and awareness campaigns.
Community Incentives	25%	12,500,000 THRM	Airdrops, referral programs, and bounty campaigns to reward engagement.
Strategic Partnerships	20%	10,000,000 THRM	Promotional collaborations with blockchain, renewable energy, and Al projects.
Content & Education	15%	7,500,000 THRM	Blog content, video explainers, technical documentation, and onboarding guides.
Events & Sponsorships	10%	5,000,000 THRM	Industry conferences, hackathons, and community meetups.

Total Allocation: 50,000,000 THRM (5% of Total Supply)

### 15.3 Intended Use of Funds

## 1. Marketing Campaigns (30%)

To ensure strong adoption, ThermAl will deploy **multi-channel marketing strategies**, leveraging both traditional and Web3-native platforms. Funds will be allocated towards:

- **Paid Advertising**: Social media ads (Twitter/X, Reddit, YouTube, TikTok), search engine marketing (Google Ads), and banner placements on blockchain-focused sites.
- **Influencer Partnerships**: Collaborations with respected crypto and renewable energy influencers to educate their audiences about ThermAI.
- Public Relations & Press: Press releases, interviews, and media outreach to get featured in top-tier publications (e.g. CoinTelegraph, Decrypt, TechCrunch).

### 2. Community Incentives (25%)

A **strong community** is the backbone of any successful blockchain project. This portion of the reserve will fund:

- **Airdrop Campaigns**: Rewarding early supporters, strategic partner communities (e.g. Flux, Dynex, Ravencoin), and new adopters.
- Referral & Ambassador Programs: Encouraging users to invite others to the ThermAl ecosystem with tiered reward structures.
- Bounty Campaigns: Engaging users in tasks such as translations, bug reporting, and content creation in exchange for THRM tokens.

#### 3. Strategic Partnerships (20%)

To expand the ThermAl ecosystem, partnerships with **blockchain projects, renewable energy companies, and Al-focused platforms** will be pursued. These partnerships will help:

- Integrate ThermAl into complementary ecosystems, such as Flux and Dynex, ensuring mutual growth.
- Provide liquidity incentives to attract miners and traders from partner communities.
- **Enable cross-promotions** to expand ThermAl's reach across different Web3 and energy sectors.

### 4. Content & Education (15%)

Ensuring that users understand ThermAl's vision and mechanics is key to adoption. This portion of the reserve will fund:

- High-quality written and video content explaining the THRM token, staking mechanisms, and ThermAl Nodes.
- Technical documentation & tutorials to onboard developers and community contributors.
- **Educational initiatives** such as AMAs (Ask-Me-Anything sessions), blog posts, and YouTube explainers.

#### 5. Events & Sponsorships (10%)

Participation in **crypto and renewable energy conferences**, hackathons, and industry events will help ThermAl gain recognition. Funds will be allocated for:

- Sponsoring industry events to showcase ThermAl's technology to institutional players and investors.
- **Hosting community meetups** to strengthen grassroots engagement.
- Organising hackathons to encourage developer participation and ecosystem expansion.

## 15.4 Long-Term Sustainability & Fund Management

The **Marketing & Community Reserve** will be released gradually over a **5-year period** to ensure sustainable growth. Token disbursements will be managed dynamically based on ThermAl's evolving needs, ensuring that funds are used efficiently and strategically.

ThermAl will also maintain **transparency in fund usage**, with periodic reports detailing how the reserve is being spent and its impact on adoption and engagement.

By leveraging this reserve effectively, ThermAl aims to **build a strong**, **engaged**, **and loyal community**, ensuring long-term success for both the **ThermAl Coin (THRM) ecosystem** and the **ThermAl Nodes business model**.

# 16. Flexible Reserve

# 16.1 Purpose of the Flexible Reserve

The **Flexible Reserve** is a designated allocation of **10%** of the total ThermAl Coin (THRM) supply (**100,000,000 THRM**), set aside to provide adaptability and strategic responsiveness to the ThermAl ecosystem. Unlike other fixed allocations such as staking rewards, liquidity mining, and marketing, the **Flexible Reserve** ensures that ThermAl can address unforeseen needs, such as unexpected increases in staking participation or liquidity shortfalls. It also allows ThermAl to capitalise on emerging opportunities, including potential partnerships, integrations with new blockchain technologies, or community-driven initiatives, without disrupting core tokenomics.

The **primary objectives** of the Flexible Reserve include:

- Long-Term Sustainability Ensuring the ecosystem remains viable beyond initial funding and planned allocations.
- Strategic Growth & Partnerships Supporting collaborations, integrations, and unexpected market shifts.
- Ecosystem Expansion Facilitating future developments such as additional staking pools, liquidity support, or governance incentives.
- Operational Adjustments Addressing potential imbalances in the token economy, including demand fluctuations or unforeseen external pressures.

#### 16.2 Potential Use Cases

The Flexible Reserve is **not pre-allocated to any single function** but remains available for distribution as required. Some of its potential applications include:

## **Supplementing Staking Rewards**

- If participation in staking exceeds initial projections, a portion of the reserve may be allocated to extend staking rewards beyond the planned five-year period.
- If additional staking pools (e.g., governance staking or node-based staking) are introduced, this reserve ensures sufficient token distribution.

#### **Liquidity Support**

• If additional liquidity pairs (e.g., **THRM/USDC**, **THRM/FLUX**) are introduced, a portion of the Flexible Reserve can be deployed to ensure liquidity depth.

 May be used to stabilise price volatility in the early phases of the project by reinforcing key liquidity pools.

### **Future Integrations & Ecosystem Enhancements**

- The blockchain and decentralised finance (DeFi) space is constantly evolving. The Flexible Reserve allows for funding integrations with strategic partners, such as Flux, Dynex, or other PoUW (Proof of Useful Work) platforms.
- If new blockchain innovations (such as layer-2 scaling solutions or cross-chain interoperability) become beneficial, the reserve provides resources to support these advancements.

#### Mineable Coin Swap Support (if needed)

- A portion of the Flexible Reserve could be reallocated to support mineable coin swaps.
   This ensures that early adopters of the mineable ThermAl Coin have an avenue to swap for THRM without negatively impacting ecosystem liquidity.
- Alternatively, it could support alternative mechanisms for rewarding mineable coin participants if direct swaps prove unsustainable.

#### **Incentivising Strategic Partnerships & Governance**

- Partnerships may require token allocations for joint initiatives or ecosystem collaborations.
   The Flexible Reserve ensures that such strategic decisions can be made without affecting investor-held allocations.
- If ThermAl moves towards a decentralised governance model (DAO) in the future, part of the reserve could be allocated for governance participation rewards.

#### **Emergency Fund & Market Stability**

- The reserve acts as an insurance mechanism against unexpected market fluctuations, ensuring ThermAI has resources to maintain stability.
- This may include controlled buybacks, liquidity injections, or protocol-level incentives to protect token value and ecosystem health.

# 16.3 Transparency

To maintain **trust and transparency**, any use of the Flexible Reserve will be publicly disclosed and subject to internal governance. The guiding principles for its allocation include:

Clear Justification – Any reallocation must have a clear rationale aligning with ThermAl's
ecosystem growth and sustainability.

- **Community Input (where applicable)** Major reallocations may be subject to governance discussions or community input to ensure alignment with investor interests.
- Gradual Deployment The Flexible Reserve will not be deployed all at once but utilised strategically over the long term.
- **Transparency Reports** Regular updates will outline how the Flexible Reserve is being used to support the ecosystem.

## **16.4 Conclusion**

The **Flexible Reserve** plays a critical role in maintaining **agility**, **sustainability**, **and adaptability** for ThermAI, ensuring it can support long-term ecosystem growth, adapt to evolving technological advancements, and reinforce ThermAI's mission of decentralised, sustainable heating and computation. By ensuring that **strategic needs**, **market opportunities**, **and unforeseen challenges** can be addressed without disrupting the token economy, the Flexible Reserve strengthens long-term viability and enhances investor confidence.

This allocation provides a **safety net** for ThermAl's evolution, allowing it to navigate the dynamic blockchain landscape while staying true to its core mission of decentralised, sustainable heating and computation.

# 17. Treasury Pool

The **Treasury Pool** is a critical component of ThermAl's long-term financial sustainability and operational flexibility. It ensures that ThermAl Token Ltd and the wider ThermAl ecosystem have the necessary resources to fund ongoing operations, strategic partnerships, ecosystem growth, and unexpected expenses. The Treasury Pool will be actively managed through a combination of algorithmic trading, strategic reinvestment, and oversight by a dedicated financial team to optimise returns while maintaining liquidity and stability.

# 17.1 Purpose of the Treasury Pool

The Treasury Pool will serve several key functions within the ThermAl ecosystem, including:

- Operational Funding Covering core business expenses such as development, security audits, marketing, and legal compliance.
- **Strategic Partnerships** Funding initiatives that drive adoption, including collaborations with blockchain platforms (e.g., Flux, Dynex), renewable energy partners, and industry stakeholders.
- **Ecosystem Sustainability** Providing liquidity and financial support to maintain staking rewards, liquidity mining incentives, and long-term sustainability of **THRM**.

• Research & Development – Financing new features, updates, and innovations within the ThermAl ecosystem, including improvements to the ThermAl Node hardware and software.

The Treasury Pool will be controlled by **ThermAl Token Ltd** and will operate transparently, with periodic reports on fund allocation and usage.

## 17.2 Composition of the Treasury Pool

The Treasury Pool will hold a **10% allocation of the total supply** (**100,000,000 THRM**) at launch. However, over time, it will be supplemented by additional revenue streams, including:

## Mining Rewards from ThermAl Nodes

- ThermAl Nodes will mine cryptocurrencies such as Flux, Dynex, and potentially ThermAl's future mineable coin.
- Mined assets will be deposited into the Treasury Pool and strategically managed to
  maximise long-term value. These assets may be held as reserves, traded for stablecoins,
  or reinvested into staking opportunities to generate additional yield and strengthen the
  ecosystem.
- ThermAl may stake, reinvest, or convert these assets into THRM or stablecoins, ensuring continued financial health.

## **Transaction Fees & Ecosystem Revenue**

- Fees from staking, liquidity mining, swaps, and other on-chain activities will contribute to the Treasury Pool.
- Future income from marketplace fees, hardware rentals, or data-processing services may also be directed into the Treasury.

## Token Buybacks & Reinvestment

- A portion of the Treasury Pool may be allocated to buybacks of **THRM tokens**, increasing demand and reducing supply.
- Buybacks will be executed based on market conditions and revenue availability, ensuring a
  sustainable approach rather than artificial price manipulation. The decision-making process
  for buybacks will involve predefined conditions, such as surplus revenue thresholds,
  liquidity needs, and approval through a multi-signature wallet.

# Stablecoin Reserves & Hedging Strategies

 The Treasury will maintain a portion of funds in stablecoins (e.g., USDC on Polygon) to ensure liquidity and protect against crypto market volatility.  Diversification may include staking or yield-generating stablecoin strategies to generate additional revenue while keeping risk minimal.

## **Liquidity Provision & Support**

- A portion of the Treasury Pool may be used to support liquidity pools (e.g., THRM/MATIC, THRM/USDC) to enhance trading volume and price stability.
- This will be done strategically, avoiding excessive market intervention.

# 17.3 Buybacks, Token Burns & Redistribution

To maintain token value and enhance long-term sustainability, the Treasury Pool may execute periodic buybacks, token burns, and redistributions, depending on ecosystem performance and revenue generation.

## **Buyback Strategy**

- If ThermAl generates significant surplus revenue (e.g. from mining operations or transaction fees), a portion may be used to repurchase THRM tokens from the open market.
- These repurchased tokens can either:
  - 1. **Be redistributed** to staking or liquidity mining pools to incentivise participation.
  - 2. **Be burned**, permanently reducing the circulating supply and increasing scarcity.

### **Treasury-Owned Staking & Yield Generation**

- ThermAl will **stake or reinvest a portion of the Treasury Pool** to generate yield, increasing overall financial reserves.
- Treasury-staked THRM tokens will not dilute user rewards but will be reinvested into the
  ecosystem via development, marketing, and operational funding.
- Treasury funds may also be used to stake stablecoins (e.g., in DeFi protocols with low-risk yield options) to generate additional passive revenue.

# 17.4 Treasury Management & Governance

To ensure transparency and responsible fund management:

- The Treasury Pool will be managed by ThermAl Token Ltd under strict oversight of ThermAl Group Ltd.
- A multi-signature wallet or DAO-like governance model may be implemented for high-value transactions, with a defined threshold of £50,000 or more. Transactions exceeding this amount will require approval from multiple signatories or a governance vote, ensuring security and accountability in fund management.

Quarterly reports on Treasury activity, fund allocation, and investment decisions will be
published for community review. This ensures that the Treasury Pool remains sustainable,
transparent, and aligned with ThermAl's long-term mission while providing financial security
for ongoing operations and expansion.

# 18. Security and Transparency

Ensuring the security of the **ThermAl Coin (THRM)** ecosystem and maintaining transparency are fundamental principles of ThermAl's commitment to long-term protection. The project will continually adapt its security measures in response to emerging threats, leveraging regular audits, threat monitoring, and proactive security updates to safeguard investors and users. of ThermAl's commitment to investors, users, and stakeholders. The project implements rigorous security measures, including **smart contract audits, liquidity lock mechanisms, and transparent reporting**, to foster trust and long-term sustainability.

# **18.1 Smart Contract Security and Audits**

Smart contract vulnerabilities pose a significant risk in the blockchain ecosystem. To mitigate these risks, **ThermAl Token Ltd** will implement the following security measures:

## **Third-Party Audits**

- All THRM smart contracts, including staking, liquidity mining, and partner reward mechanisms, will undergo a third-party security audit by a reputable blockchain security firm before launch.
- These audits will identify vulnerabilities such as reentrancy attacks, flash loan exploits, integer overflows, and backdoor risks.
- The audit reports will be made publicly available on the official ThermAl website and
   GitHub repository to maintain full transparency and easy access for the community.

### **Bug Bounty Program**

- ThermAl will establish a bug bounty program to encourage white-hat hackers and developers to identify and report vulnerabilities before they can be exploited.
- Bounties will be issued in THRM tokens or stablecoins, based on the severity of the reported vulnerability.

#### **Multi-Signature Governance**

 Critical changes to smart contracts, liquidity pools, or treasury allocations will require multi-signature approval from key ThermAI team members.  This prevents single points of failure and mitigates risks from insider threats or compromised wallets.

# 18.2 Liquidity Lock Mechanisms

Liquidity security is essential to prevent **rug pulls** or **market manipulation**. ThermAl will implement robust liquidity lock mechanisms:

## **Initial Liquidity Lock**

- 60% of public sale funds allocated to liquidity will be locked for 24 months on Uniswap (THRM/MATIC pool).
- This lock ensures that ThermAl cannot withdraw liquidity immediately after launch, preventing sudden market instability.
- Once the lock is complete, any withdrawal of liquidity will be gradual to prevent market fluctuations. ThermAl will publish why liquidity was withdrawn and what has been done with the funds in its quarterly reports.

## 18.3 Transparent Reporting

Transparency is key to maintaining investor and community confidence. ThermAl Token Ltd will adopt a **public reporting structure** that provides full visibility into tokenomics, development progress, and financial operations.

#### On-Chain Transparency

- All smart contract transactions, including staking rewards, liquidity mining payouts, and treasury allocations, will be publicly verifiable on the Polygon blockchain explorer (Polygonscan).
- ThermAl will maintain an open-source repository where users can review the smart contract code.

## **Financial and Token Distribution Reports**

ThermAl Token Ltd will publish:

- Quarterly Financial Reports detailing token inflows, expenditures, and treasury holdings.
- 2. **Monthly Token Distribution Reports** showing staking rewards, liquidity mining incentives, and treasury movements.

## 18.4 Compliance & Legal Framework

ThermAl Token Ltd is structured to comply with **UK and international crypto regulations**. To ensure full compliance, ThermAl will engage with legal experts and regulatory consultants to navigate evolving financial laws and maintain a secure and compliant ecosystem.

#### **KYC/AML Compliance for Private Sale Investors**

 Private sale investors will undergo Know Your Customer (KYC) verification to prevent illicit activities and align with financial regulations.

#### **Regulatory Compliance and Future Adjustments**

- ThermAl will stay up to date with evolving FCA and global regulatory requirements to ensure long-term compliance.
- Future legal updates or adjustments to token functionality will be transparently communicated to investors and the community.

# 18.5 Team Transparency and Doxing Policy

Transparency in leadership is crucial for investor confidence and community trust. Unlike anonymous projects, **ThermAl Token Ltd** will be led by a **fully doxed team**, ensuring accountability and legitimacy.

#### **Public Team Disclosure**

- **Christopher Smart**, the founder of ThermAI, along with key team members, will have their identities publicly verifiable.
- The core team, including developers, advisors, and executives, will be listed on the
  official ThermAl website, with professional backgrounds and LinkedIn profiles where
  applicable.

#### **Legal Business Registration**

- ThermAl Token Ltd and ThermAl Dynamics UK Ltd will be legally registered UK companies, operating under UK corporate law.
- Company registration details will be publicly available for verification through official government sources (Companies House).

#### Community Engagement and Public Appearances

 The core team will actively participate in community AMAs (Ask Me Anything sessions), interviews, and industry events to reinforce trust. • Regular video updates and reports will be published on YouTube, Twitter, and Discord, ensuring transparency and engagement.

### **Security Considerations**

- While the team is publicly verifiable, personal security measures will be in place to protect against doxing-related risks, such as phishing attacks and social engineering threats.
- Certain non-essential team members and developers may remain pseudonymous for security reasons, but their work and contributions will be publicly auditable.

## **Commitment to Trust and Transparency**

By maintaining a **fully doxed leadership**, legal business registration, and open community engagement, **ThermAl reinforces its legitimacy** as a serious, long-term project. These measures differentiate ThermAl from **anonymous or high-risk ventures** and provide investors with confidence in the project's sustainability.

# 19. Roadmap V1

This first version of the **ThermAl Roadmap** outlines the strategic development of the project, focusing on key milestones such as the token launch, staking pools, liquidity mining, and **ThermAl Node** deployments. The roadmap ensures that ThermAl follows a structured and transparent growth trajectory, delivering value to both investors and ecosystem participants. As with every project, this roadmap is subject to change and development over time. New ideas may be added or removed, and community input may steer our direction.

# Phase 1: Token Deployment & Ecosystem Setup (Q1–Q2 2025)

**Objective:** Establish the foundational infrastructure for the ThermAl token, including liquidity, staking, and reward mechanisms, while preparing for initial **ThermAl Node** deployments.

#### Q1 2025

- Finalise and publish the **ThermAl Whitepaper**.
- Incorporate ThermAl Group Ltd, ThermAl Dynamics UK Ltd, and ThermAl Token Ltd for structured legal and financial operations.
- Conduct **Private Sale** of THRM tokens to early investors.
- Finalise **smart contract audits** for token security and compliance.
- Deploy **THRM token** on **Polygon PoS**, ensuring scalability and low transaction fees.

- Lock THRM/MATIC liquidity on Uniswap for 2 years to build investor confidence. Future liquidity pools, such as THRM/USDC, will be considered based on market demand and ecosystem growth.
- Initiate Community Building & Marketing Campaigns to attract early supporters.

#### Q2 2025

- Conduct Public Sale (IDO) to raise additional development capital.
- Enable **THRM Staking Pools**, allowing investors to stake tokens and earn rewards.
- Launch **Liquidity Mining Program** to incentivise THRM/MATIC liquidity providers.
- Release **ThermAl DApp** (**Phase 1**) with staking functionality and reward tracking.
- Allocate Partner Mining Rewards Pool, enabling token holders to benefit from strategic collaborations.
- Develop first prototype ThermAl Node, integrating efficient heat recovery and renewable energy usage.
- Begin initial testing of ThermAl Nodes in a controlled environment.

# Phase 2: Expanding Utility & Initial Deployments (Q3 2025–Q3 2026)

**Objective:** Expand token utility by integrating real-world applications while scaling up **ThermAl Node** deployments.

### Q3 - Q4 2025

- THRM Staking Rewards Expansion, with additional fixed-term staking options.
- Enable Partner Mining Rewards Pool Payouts based on early participation.
- Release ThermAl DApp (Phase 2), introducing real-time staking statistics and enhanced UI.
- Pilot deployment of first batch of ThermAl Nodes in social housing & council partnerships.
- Implement Octopus Energy tariff integration to optimise mining profitability.
- Expand community incentives, including airdrop campaigns and marketing initiatives.
- Launch ThermAl Nodes Profit Pool, rewarding early adopters with additional THRM incentives.

## Q1 2026

- Expand ThermAl Node pilot into 50+ social housing units.
- Establish first third-party integrations with smart home automation platforms, solar, and heating manufacturers.
- Expand ThermAl DApp (Phase 3) to integrate early-stage ThermAl Node monitoring.
- Introduce THRM/USDC liquidity pool to improve trading flexibility.

#### Q2-Q3 2026

- Increase ThermAl Node installations to 100+ Units across multiple housing associations and councils.
- Release Heater Staking Model, allowing users to stake THRM for heater funding and profit-sharing.
- Establish new ecosystem integrations and partnerships.

# Phase 3 - The Future! (Q4 2026 +)

**Objective:** Expand the ThermAl ecosystem by enhancing token adoption, developing real-world integrations, and exploring blockchain innovations.

#### Q4 2026 +

- Expand into private and commercial sales, forming strategic partnerships with heat pump and hot water cylinder manufacturers to enhance market reach.
- Develop ThermAl's own mineable coin and blockchain, creating a self-sustaining
  ecosystem for decentralised heating and Al processing. The initial research and planning
  phase will begin in Q4 2026, with a testnet launch targeted for mid-2027. The full
  implementation, including community governance and integration with the ThermAl Nodes
  network, is expected to roll out in 2028, contingent on adoption rates and community
  feedback.
- Expand THRM staking pool and other rewards to support long-term participation and engagement.
- Improve ThermAl DApp with enhanced mining, and staking analytics.
- Introduce cross-chain compatibility, allowing THRM to interact with other blockchain ecosystems.
- Launch PoUW on our own chain, initially integrating with existing blockchain networks to attract users who want to utilise the **ThermAl Node** network and benefit from its green sustainability and social value. Over time, we will assess whether transitioning to a fully independent blockchain is feasible based on adoption and ecosystem needs.
- Expand the ThermAl Nodes Profit Pool to include community-driven initiatives such as
  grant-funded development projects, user-led sustainability programs, and incentivised
  participation in governance proposals. Funding will be sourced from a portion of transaction
  fees, treasury reserves, and ecosystem partnerships to ensure sustainability and long-term
  impact.
- Conduct international expansion feasibility study, exploring deployment opportunities in Europe and North America.
- Continuously adapt based on community feedback and ThermAl Node adoption.

### **Conclusion: Sustainable Growth & Innovation**

The **ThermAl Roadmap** follows a phased strategy that prioritises the **THRM token ecosystem** to establish a strong foundation for staking, liquidity, and community incentives. This approach enables the **ThermAl Nodes** to integrate seamlessly into the ecosystem, ensuring long-term sustainability and adoption.

With a structured rollout of staking pools, liquidity mining and network expansion, **ThermAl** is set to become a leading force in decentralised Al-powered heating and computation.

The roadmap will be reviewed on a **quarterly basis** to assess progress, incorporate technological advancements, and respond to market conditions. Community feedback will be actively gathered through periodic surveys, and dedicated discussion forums to ensure the roadmap aligns with user needs and ecosystem growth.

# 20. Conclusion

ThermAl represents a pioneering fusion of blockchain technology and sustainable heating solutions, leveraging GPU-based computation to provide a tangible, real-world benefit: affordable, eco-friendly heating. By integrating decentralised computing with innovative home heating technology, ThermAl introduces a novel approach to addressing energy inefficiencies while unlocking new financial opportunities for users, miners, and investors alike.

The **THRM token** serves as the backbone of this ecosystem, enabling community participation through staking, liquidity mining, and partner mining rewards. Through its carefully structured tokenomics, and long-term sustainability strategies, ThermAl ensures the continued viability and growth of its ecosystem. The tokenomics model prioritises fairness, engagement, and value retention, reinforcing investor confidence while maintaining a steady trajectory for the project's evolution.

From the structured liquidity pools and staking incentives to the planned **ThermAl Nodes** that will transform wasted heat into usable energy, ThermAl is poised to disrupt traditional energy consumption models. The project's roadmap outlines a clear, phased development approach, ensuring milestones are met with transparency and accountability. Through strategic partnerships with established blockchain ecosystems such as Flux, Dynex, and Ravencoin, ThermAl is positioning itself as a key player in the decentralised computing and sustainable energy sectors.

Security and transparency remain at the core of ThermAl's vision. Rigorous smart contract audits, liquidity lock mechanisms, and transparent fund allocations establish a foundation of trust with

investors and users alike. Additionally, the ThermAl treasury and flexible reserve mechanisms provide a safeguard against market volatility, ensuring long-term stability and adaptability.

As the project progresses, ThermAl will continue to explore advancements in Proof of Useful Work (PoUW), validator nodes, and potential expansions into Al-driven computation. By combining financial incentives with meaningful environmental and social impact, ThermAl stands as a forward-thinking solution to some of the most pressing challenges in energy efficiency and decentralised technology.

With a strong foundation, a dedicated team, and a community-driven approach, ThermAI is well-positioned to become a leading force in the convergence of blockchain technology and sustainable home heating. Investors, developers, and energy-conscious individuals are invited to join this transformative movement, as ThermAI sets the stage for a decentralised, efficient, and environmentally responsible future.

Be part of the movement towards decentralised computing and sustainable heating with ThermAI! - www.ThermAI.uk

