ultra sound money
ether, the asset
1 Devcon talk about ETH (out of 330)
Ethereum – internet settlement
no Ethereum without ETH

Ethereum – internet settlement

ETH – internet money
temperature of money (velocity)

liquid
temperature of money (velocity)

solid

liquid
temperature of money (velocity)

solid  liquid  gas
temperature of money (L1)
temperature of money (L1)

stake

staking
temperature of money (L1)

- stake
- staking
- burn
- fees
temperature of money (L2)
temperature of money (L2)

collateral

bonding
temperature of money (L2)

collateral

bonding

transacting

currency
programmable money

security
programmable money

security

bandwidth

sustainability

activity
programmable money

sustainability

activity
1) security
2) sustainability
3) bandwidth
4) activity
1) security
2) sustainability
3) bandwidth
4) activity
security ratio

\[
\text{security ratio} = \frac{\text{total value secured}}{\text{economic security}}
\]
TOTAL VALUE SECURED: 0.37T USD
SECURITY RATIO: 20.0x
security ratio

TOTAL VALUE SECURED
0.37T USD

SECURITY RATIO
20.0x

ETHEREUM SECURES

ETH
161.70B USD

ERC20s
188.35B USD

NFTs
22.95B USD
economic security

$20B
economic security

$10B

$20B
economic security

$10B

$20B

$Ts

endgame
ETH deposits
ETH deposits

20K ETH/day
ETH deposits

- 14.2M ETH
- 20K ETH/day
issuance
yield from issuance

8%

4M ETH
yield from issuance

4% | 4M ETH
8% | 16M ETH
yield from issuance

2%

4%

8%

4M ETH

16M ETH

64M ETH
the importance of ETH price

$20B

today
the importance of ETH price

$20B today

50x

$1T
the importance of ETH price

$20B

2x ETH staked

$40B

$1T
the importance of ETH price
Minimum viable issuance

2015—genesis

= 1M ETH/year
minimum viable issuance

2015—genesis

2017—byzantium

= 1M ETH/year
minimum viable issuance

2015—genesis

2017—byzantium

2019—constantinople

= 1M ETH/year
minimum viable issuance

2015—genesis
2017—byzantium
2019—constantinople
2022—merge

= 1M ETH/year
minimum viable issuance

= 1M ETH/year

2015—genesis

2017—byzantium

2019—constantinople

2022—merge

optimal issuance
minimum viable issuance

2015—genesis

2017—byzantium

2019—constantinople

2022—merge

= 1M ETH/year

optimal issuance

ossification
1) security
2) sustainability
3) bandwidth
4) activity
Ethereum as a company

\[ \text{profits} = \text{income} - \text{expenses} \]
Ethereum as a company

\[
\text{profits} = \text{income} - \text{expenses}
\]

\[
\text{profits} = \text{blockspace sales} - \text{security budget}
\]
Ethereum as a company

\[ \text{profits} = \text{income} - \text{expenses} \]

\[ \text{profits} = \text{blockspace sales} - \text{security budget} \]

\[ \text{profits} = \text{burn} - \text{issuance} \]
Ethereum as a company

\[ \text{profits} = \text{income} - \text{expenses} \]
\[ \text{profits} = \text{blockspace sales} - \text{security budget} \]
\[ \text{profits} = \text{burn} - \text{issuance} \]

annualized profits \hspace{2cm} 5.7B USD

growth profile \hspace{2cm} 28.4 P/E
supply since merge
issuance and burn

**Burn**
- 2,247K ETH/year

**Supply Growth**
- -1.34% /year

**Issuance**
- 603K ETH/year

**Time Frame**
- 432d
supply growth—200Y projection
ultra sound money meme

sound money

capped supply
21M BTC
ultra sound money meme

---

sound money

capped supply

BTC

21M BTC

---

ultra sound money

decreasing supply

ETH

121M ETH
bat signal
5,000+ fam
1) security
2) sustainability
3) bandwidth
4) activity
Economic bandwidth

1.4M ETH

0.5M ETH
pristine collateral

✅ no contract risk
pristine collateral

- no contract risk
- no custodial risk
pristine collateral

- ✓ no contract risk
- ✓ no custodial risk
- ✓ no oracle risk
pristine collateral

- no contract risk
- no custodial risk
- no oracle risk
- no bridge risk
pristine collateral

- no contract risk
- no custodial risk
- no oracle risk
- no bridge risk
- no governance risk
pristine collateral

- no contract risk
- no custodial risk
- no oracle risk
- no bridge risk
- no governance risk

- volatility
decentralised stablecoins

1.4M ETH

0.5M ETH

28K ETH
decentralised stablecoins

1.4M ETH

0.5M ETH

28K ETH

2M ETH
ETH as collateral

today

14M ETH

2M ETH

in 10 years?
ETH as collateral

**today**

14M ETH

2M ETH

**in 10 years?**

30M ETH

30M ETH
the importance of ETH price

$1B

today
the importance of ETH price

$1T

$1B

today

1,000x
the importance of ETH price

$1T

$1B

$15B

15x ETH collateral
the importance of ETH price

$1T

$1B

$15B

15x ETH collateral

66x ETH price
illiquidity multiplier
ETH marketcap = [marketcap of 💧] x [1 /💧%]

illiquidity multiplier
illiquidity multiplier

today

80%
illiquidity multiplier

today

\[ \text{illiquidity multiplier} = \frac{1}{80\%} = 1.25 \times \]

80%
illiquidity multiplier

Today:
- illiquidity multiplier = 1 / 80% = 1.25x

In 10 years?
- Illiquidity multiplier = 20%
illiquidity multiplier

today

illiquidity multiplier

= 1 / 80% = 1.25x

in 10 years?

illiquidity multiplier

= 1 / 20% = 5x
1) security
2) sustainability
3) bandwidth
4) activity
economic activity

fluidity
liquidity
diversity
vitality
economic activity

fluidity
liquidity
diversity
vitality

scalability
scaling

100x rollups
10 tx/s

100x sharding
1K tx/s

100x
100K tx/s

100x
10M tx/s
Scaling

- Rollups: 100x
  - 10 tx/s
- Sharding: 100x
  - 1K tx/s
- Nielsen: 100x
  - 100K tx/s
  - 1M tx/s
ultra sound barrier

10 tx/s → 1,000,000x → 10M tx/s
<table>
<thead>
<tr>
<th>Conversion Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000,000x</td>
<td>10 tx/s to 10M tx/s</td>
</tr>
<tr>
<td>0.000,001x</td>
<td>3M Gwei/tx to 3 Gwei/tx</td>
</tr>
</tbody>
</table>

- **Ultra Sound Barrier**: This image illustrates a significant increase in transaction per second (tx/s) and a minor decrease in Gwei/tx. The blue cloud icon signifies the barrier.
daily blockspace sales
supply—100M ETH
big picture summary

- **security** — 33M ETH
- **supply** — 100M ETH
- **collateral** — 33M ETH
- **currency** — 33M ETH
big picture summary

- **security**—33M ETH
- **issuance**—1M ETH/year
- **supply**—100M ETH
- **collateral**—33M ETH
- **currency**—33M ETH
big picture summary

**supply**—100M ETH

**burn**—1M ETH/year

**security**—33M ETH

**issuance**—1M ETH/year

**collateral**—33M ETH

**currency**—33M ETH
big picture summary

- **supply**—100M ETH
- **burn**—1M ETH/year
- **income**—$1Bs/day
- **security**—33M ETH
- **issuance**—1M ETH/year
- **collateral**—33M ETH
- **currency**—33M ETH
big picture summary

- **Supply**: 100M ETH
- **Security**: 33M ETH
- **Issuance**: 1M ETH/year
- **Burn**: 1M ETH/year
- **Income**: $1Bs/day
- **Collateral**: 33M ETH
- **Bandwidth**: $10Ts
- **Currency**: 33M ETH
- **Stablecoins**: $10Ts
thank you :)

justin@ethereum.org
supply since merge
cost of money

ultrasound.money