

# PRÜF.io



PRÜF THAT IT'S GENUINE. PRÜF THAT IT'S YOURS.

# PRÜF.io

## Key technical features

- Privacy-first provenance platform
- Instant verification of ownership, authenticity, and provenance
- The permanence of blockchain, with the flexibility of IPFS
- Distributed infrastructure - censorship resistant and tamper-proof

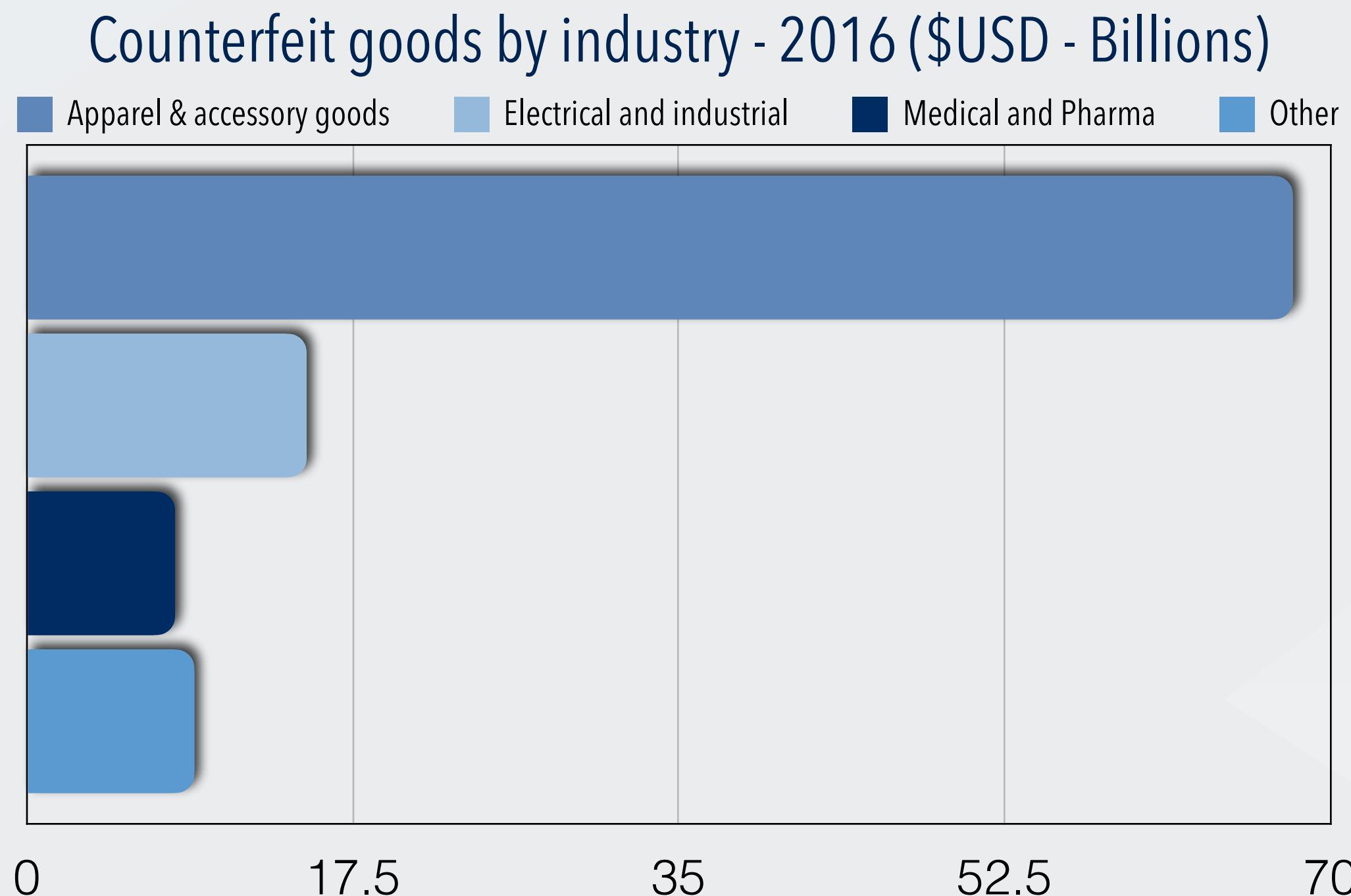
## PRÜF.io value proposition

---

Brand piracy and counterfeit goods cost economies billions in lost revenue.

- Sales are directly lost to counterfeit products.
- Inferior quality of copies damages customer confidence.
- Concerns about quality or authenticity erode brand value and image.
- Lost opportunities for revenue-producing customer interactions can further reduce profitability.
- Brand value creates a perverse incentive for counterfeiters, stifling growth and limiting the value trajectory of innovative products.

Counterfeit physical goods account for more than 3.3% of global trade.



- Total value of global trade in fake goods was \$878 Billion by 2018, and is expected to exceed \$1T by 2022
- Fakes are only getting more sophisticated and more difficult to detect
- impact extends to critical industrial components in all segments of the supply chain.

# PRÜF.io

Turnkey Solutions for manufacturers and resellers

- Authenticity and provenance guaranteed on the blockchain.
- Instantly verifiable with any smartphone prior to purchase.
- Items can be privately registered by the buyer, leading to brand education, up-sells, or additional purchases.
- PRÜF enabled assets can be securely transferred and trivially linked to secondary markets (think eBay partnership).



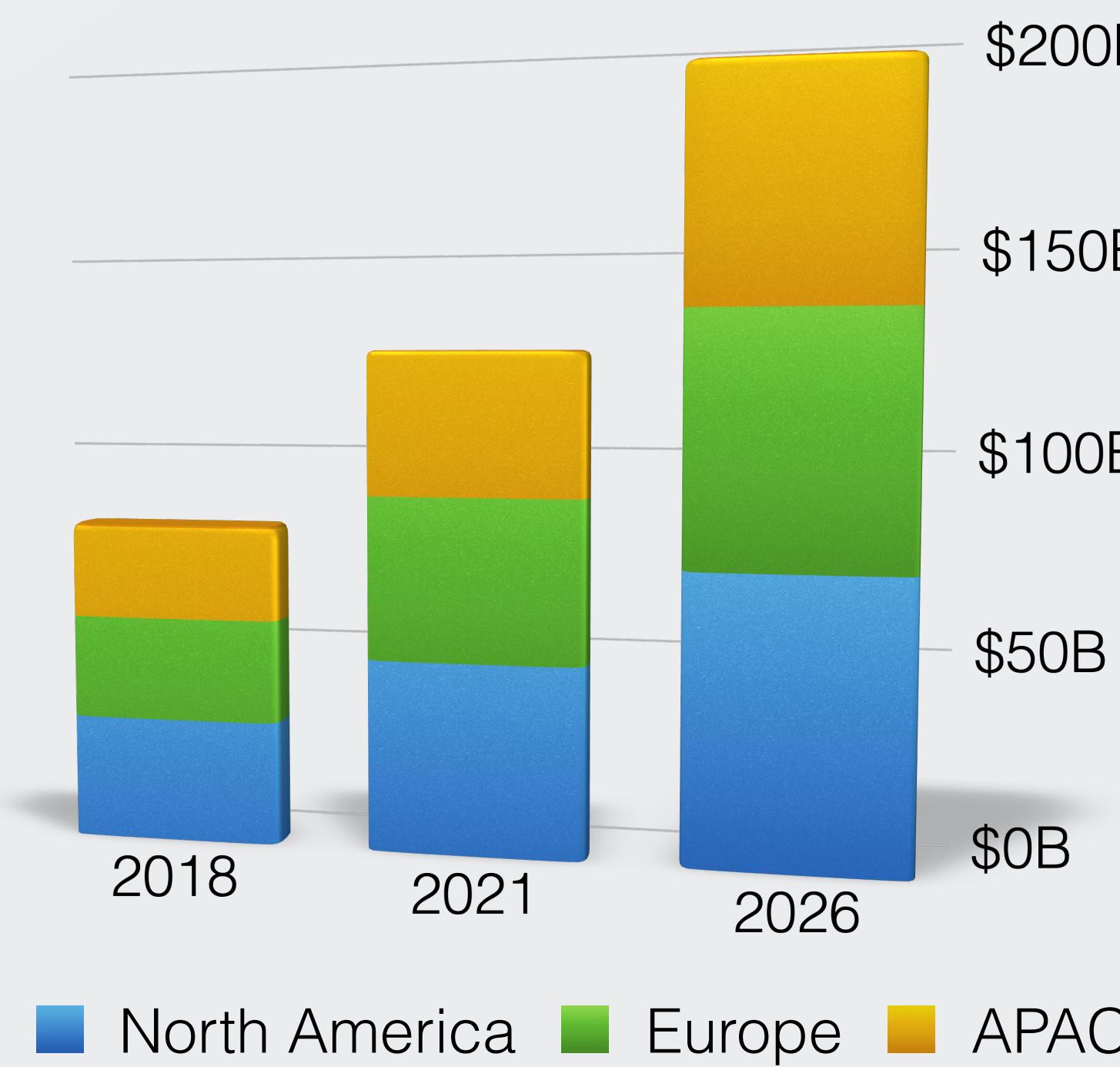
# PRÜF.io

---

Market potential is growing every year.

- Major sportswear brand Nike sells over 150 million pairs of shoes a year. With an average fee of \$0.10 per pair, that would be a 15mm/year revenue from one major customer in a single vertical.
- Competing solutions require significant investments in manufacturing or in-house IT resources, and can be vulnerable to corruption or hacking. PRÜF asset tag minting is handled on chain.
- PRÜF is designed to integrate easily with existing retailers and platforms, anchoring products that move through those platforms to brand portals to provide additional revenue opportunities.

The anti-counterfeit packaging market is rapidly growing.



- In 2018 North America held 31.4% of the Anti-Counterfeit Packaging (ACP) market. High demand from the healthcare, electronics, food/beverage, and cosmetics segments are driving growth.
- Europe spends \$13B+ a year on illicitly sourced drugs, many of which are counterfeit. The region is aggressively adopting ACP to avoid huge losses in revenue.
- APAC is expected to grow with a CAGR over 10%, owing to the growth of the ACP segment in China.
- Most existing solutions only raise the bar for counterfeiters.
- PRÜF makes each item verifiably unique and guarantees authenticity.
- PRÜF makes consumer verification instant and easy, crowdsourcing verification and incentivising retailers to care.

# PRÜF.io

---

PRÜF makes product authentication free, instant, accessible, and private.

- Accessible to individuals and businesses from any internet connected device.
- Nominal marginal cost to manufacturers, based on blockchain and IPFS.
- Verification and registration gives brands additional customer engagement opportunities, leading to additional value-producing actions.
- Personal registration with PRÜF is private and secure. PRÜF stores no personally identifiable information, and allows only owners to prove ownership.
- PRÜF can also handle asset transfers, payments, escrows, etc. on-chain and is extensible to accommodate any type of asset management business logic.

## PRÜF.io value proposition

PRÜF secures private commerce and ownership, adding value for users

- With PRÜF, ownership and authenticity is easily provable, reducing risks in private commerce.
- Lost or stolen items can be marked in PRÜF to facilitate return through bounties.
- Buyers or resellers can instantly check the provenance and status of items, making stolen items harder to sell.
- Free, easy checks are part of due diligence before buying. PRÜF reduces incentives for theft.
- Customizable business logic allows escrows, collateralized transactions, and more
- When used as designed, PRÜF does not store personally identifiable information.
- Registration with PRÜF is secure and private. Only the owner of a PRÜF enabled asset can prove ownership.

# PRÜF.io

---

PRÜF produces revenue with every interaction.

- Each PRÜF asset has a base cost for actions such as transfers or modifications, as well as an optional cost added by the node operator for that class. PRÜF retains 5%-49% of this fee as well, depending on the provisioning of the node.
- Network fees may be charged to end users or subsidized by node operators
- Fees charged by the network and by node operators can be adjusted as needed, and are enforced on-chain



## The PRÜF ecosystem

- Each asset tokenized with PRÜF is a member of an Asset Class (AC). Each Asset Class is represented by an ACNode.
- ACNodes control the ways that a PRÜF asset can be used in the PRÜF infrastructure. ACNodes may differ in business logic, use costs, and application interfaces.
- Each ACNode is controlled by an ACNodeKey. ACNodeKeys are ERC721 based tokens, which act as access keys for the administration of ACNodes.
- ACNodeKey Holders can configure the namespace, pricing, payment address, and business logic of their ACNode. Typically, ACNode holders would also provide a customized interface for users to access the PRÜF infrastructure.
- With the implementation of PIP170, ACNodes can be operated in a decentralized fashion. Decentralized ACNodes (dNodes) feature staking, revenue sharing, and community governance.

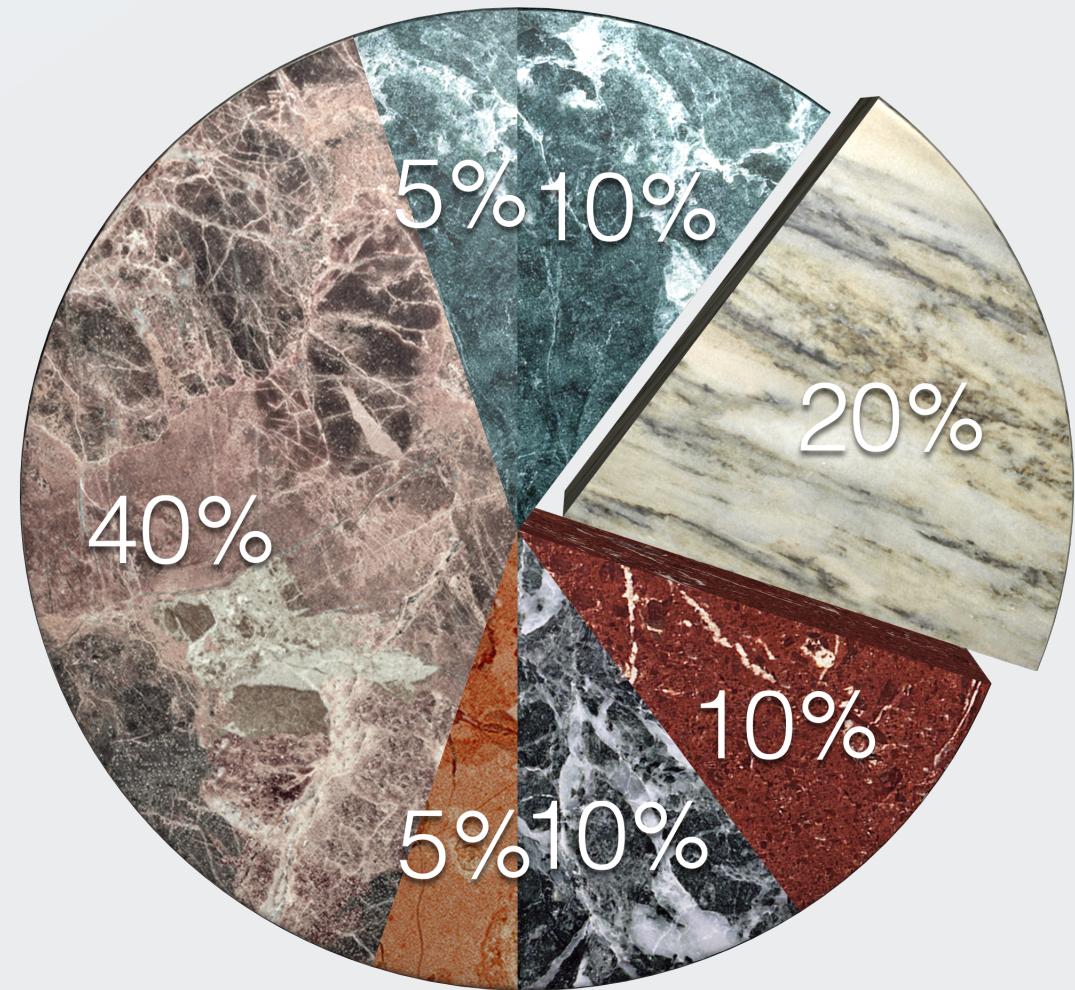


## Token Details

- The PRÜF utility token (PRUF) is a fungible ERC20 token which helps to scale and secure the economic growth of the platform. PRUF functions as “gas” for fee based operations, and under the “services discount model” for provisioning ACNodes. In addition to this, PRUF is burned in the minting of ACNodeTokens.
- ACNodeTokens are ERC721 derivative non-fungible tokens which act as access keys to control ACNodes. They allow the holder to control the namespace, network pricing, payment address, and business logic associated with the management of PRÜF enabled assets used within their designated class.
- Minting ACNodeKeys requires burning a progressively increasing amount of PRUF, scaling upward as more ACNodeKeys are minted. This creates a deflationary pressure on PRUF while building value in existing ACNodeKeys to reward early adopters and encourage liquidity in unused keys.

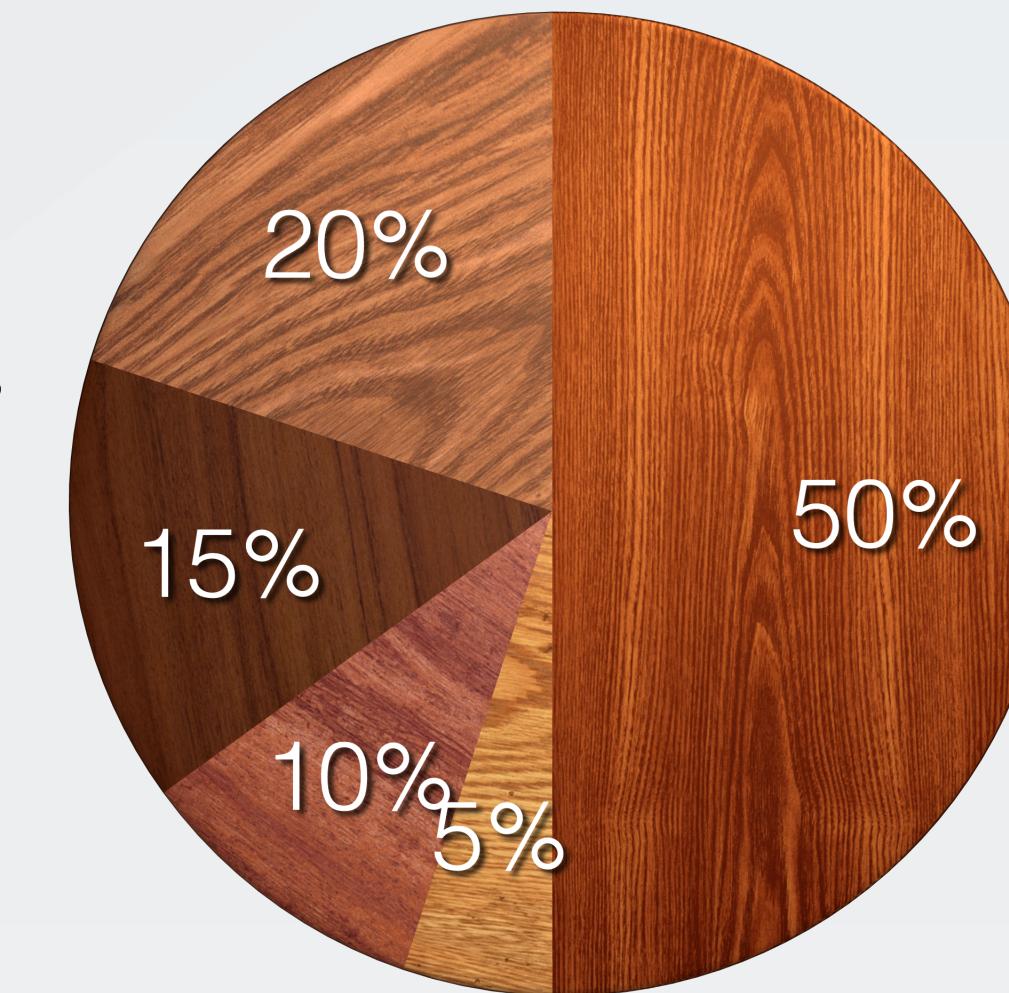
# PRÜF.io

## PRUF token distribution metrics



- Liquidity Fund
- Foundation
- Team
- Bounties/Grants
- Airdrop/presale
- ICO
- Partners/Advisors
- Bus DEv/ Marketing
- Other
- G&A
- Development
- Personell/Professionals

## PRUF Foundation allocation



Total Supply: Up to Ü4,000,000,000

Currently in circulation less than Ü30,000,000

Team: 10%, unlocked over 4 years

Token Address: 0xa49811140E1d6f653dEc28037Be0924C811C4538



## Core values

- Data Sovereignty - you should be in control of your data and how it is used. PRÜF does not collect sensitive data from its users.
- Safety - PRÜF systems are engineered so that they will not inadvertently or intentionally compromise the security, privacy, or agency of users.
- Personal Agency - PRÜF strives to increase the freedom of its users from the external application of coercive force, whether financial, physical, or social.
- Sustainability - As a blockchain-based service, PRÜF is designed to stand the test of time.
- Do No Harm - The developers of PRÜF are committed to building a tool that will not be used to deprive others of their rights, freedom, or property.

# TEAM

## Technical Team



Clifford Smyth

Project Lead. PRÜF Protocol  
and Smart Contract Developer.  
  
Industrial / Embedded Control,  
ASM, FORTH, C, C++, Python,  
Solidity.



Blayne Smyth

Lead Front-End/UX Developer  
  
Aerospace and embedded  
control, C, Javascript, React.js,  
Web3



Valin Smyth

AV & Graphic Design  
  
Web Designer, Ops manager



Drake Smyth

Sol. Testing Lead, UX Design  
  
TypeScript, Javascript, CSS,  
Solidity



Adrienne Eby

Technical Editor



Raoul Chapman

Logistics



Sabrina Duncan

Brand Ambassador



Ryan DeCorso

Compliance Liaison

## Advisors and supporting roles