



# QUANTUM RESISTANT LEDGER

## Transparency Report

05/2020 – 05/2021

# Introduction

Die QRL Stiftung (“The Foundation”) was founded to oversee the maintenance of the open source software project “The Quantum Resistant Ledger”, located at <https://github.com/theqrl>

The Foundation acts as the decision-making body which advises on developmental priorities and digital asset distribution to best achieve its goal.

As an organisation, the Foundation does not seek to make a profit or seek to bolster its assets.

In 2020 - 2021 there was no change to the founding assets.

## **The Foundation Board**

**May 2021**

# Assets

Reporting Period May 2020 - May 2021

## Total assets start of period

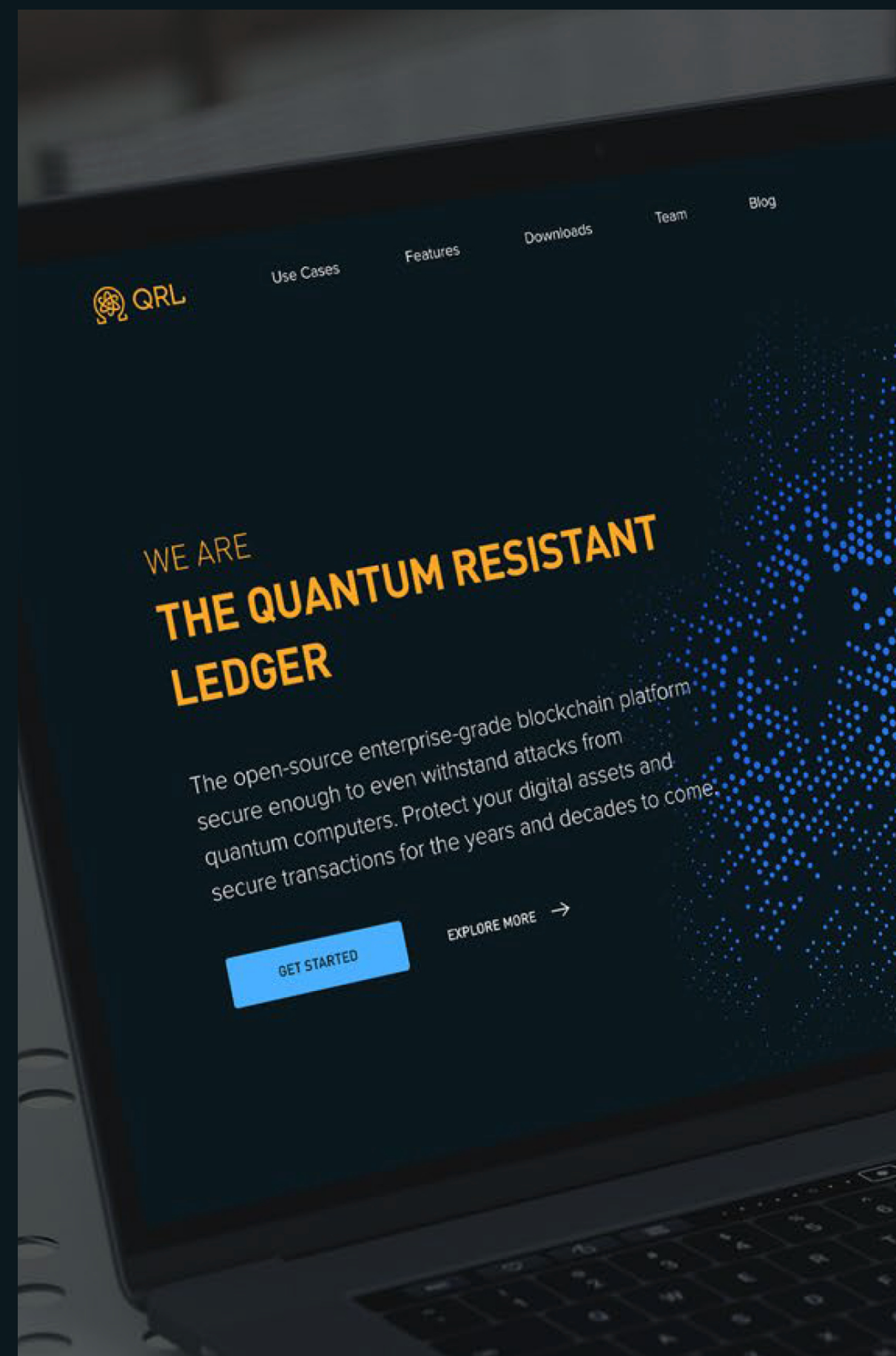
4.48M USD equivalent

## Total assets end of period

35.04M USD equivalent

Comprising:

- QRL: 4.08M USD equivalent
- Other crypto-assets: 30.96M USD equivalent



# Priorities 2020-2021

## 1. Development

1. Enclave: post-quantum security for the Ethereum blockchain
2. Upgrade and support of existing ecosystem following successful hard fork
3. Support of latest Ledger Nano devices and firmware
4. Mobile wallet
5. Non-GRPC based chain interaction service development
6. Web & desktop wallet supporting multisignature capabilities
7. Moving end-user code towards a single common code base

## 2. Outreach

1. Widen the awareness of QRL technologies in the industry
2. Engage partners and potential future partners

## 3. Research

1. Engage research partners
2. Further advances in post-quantum security of proof-of-stake consensus mechanisms:
  - Lattice-based signature aggregation cryptography
  - Lattice-based threshold cryptography
  - Lattice-based ZK systems
3. Original research into PQ blockchain design

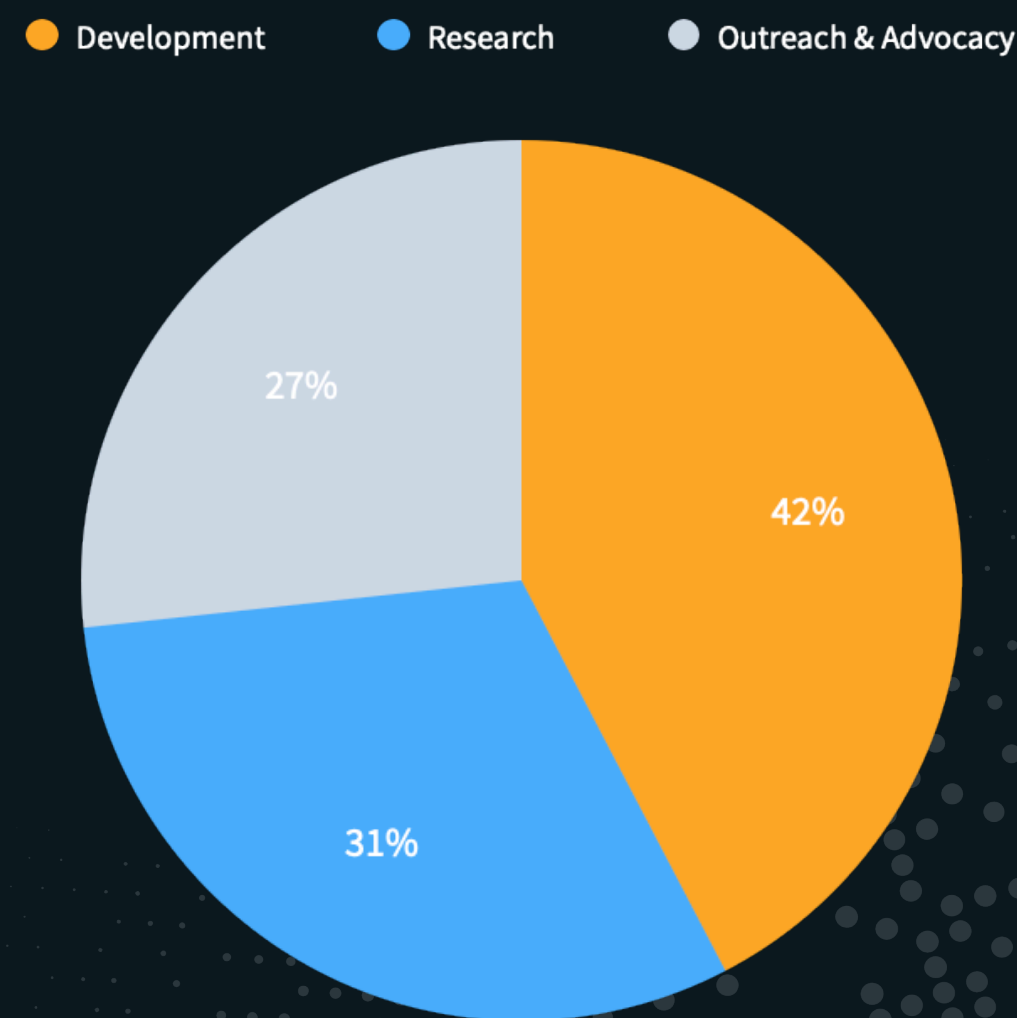
## 4. Advocacy

1. Ecosystem documentation
2. Website redevelopment
3. Broadening production of multimedia educational content
4. Engage potential developers

# Expenditure 2020-2021

Development	290000
Research	212000
Outreach & Advocacy	183000
Total	685000

- NB.**
- All figures in USD equivalent at time of expenditure
  - Research costs include grants award
  - Development costs include code audit



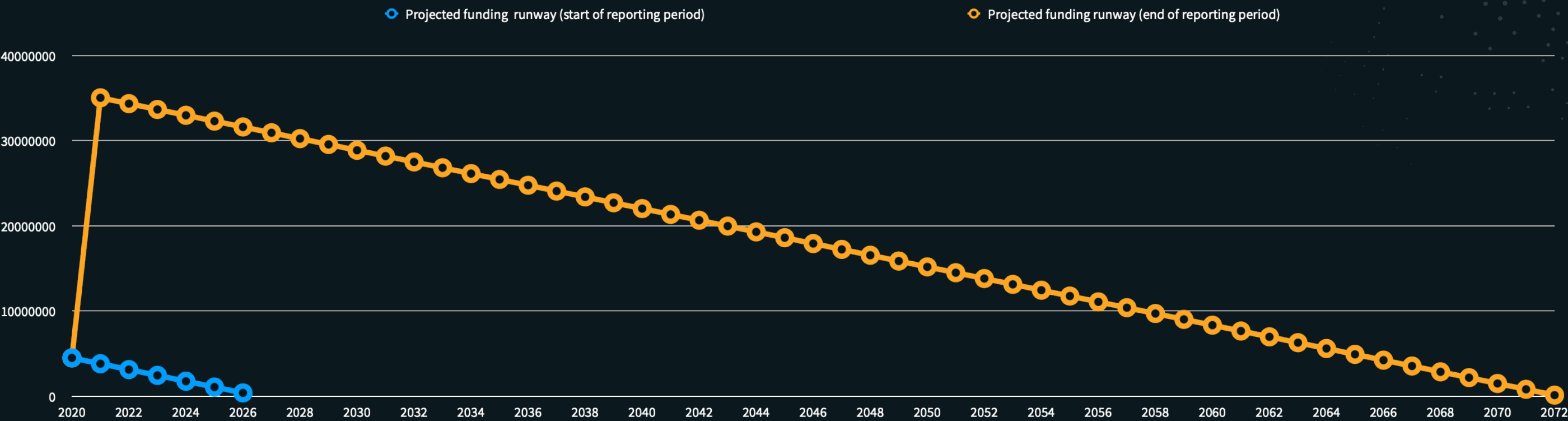


# Burn Rate

Based on total assets of 4.48M USD equivalent at the start of the reporting period, the burn rate for May 2020 - May 2021 was **15.29%**.

# Project Runway

Excluding crypto-asset price volatility during reporting period this translates to a runway of **6.6 years** of project funding. Crypto-asset appreciation during the reporting period extends runway at current burn rate to **51 years**.



# Recommendations

## 2021-2022

### 1. Burn rate

Substantial increase in annual expenditure over next reporting period.

### 2. Development priorities

Establish a dedicated development hub with partners in UAE.

Significant expansion of developer contractors to expedite all areas of the project roadmap including POS, smart contracts etc.

Quality assurance via external audit of code.

### 3. Research priorities

Completion of existing research roadmap over the next reporting period including professional peer review of original cryptography.

### 5. Advocacy & Outreach priorities

Broadening production of multimedia educational content

Publication of research outputs and widen public awareness of post-quantum security, blockchain and the QRL.

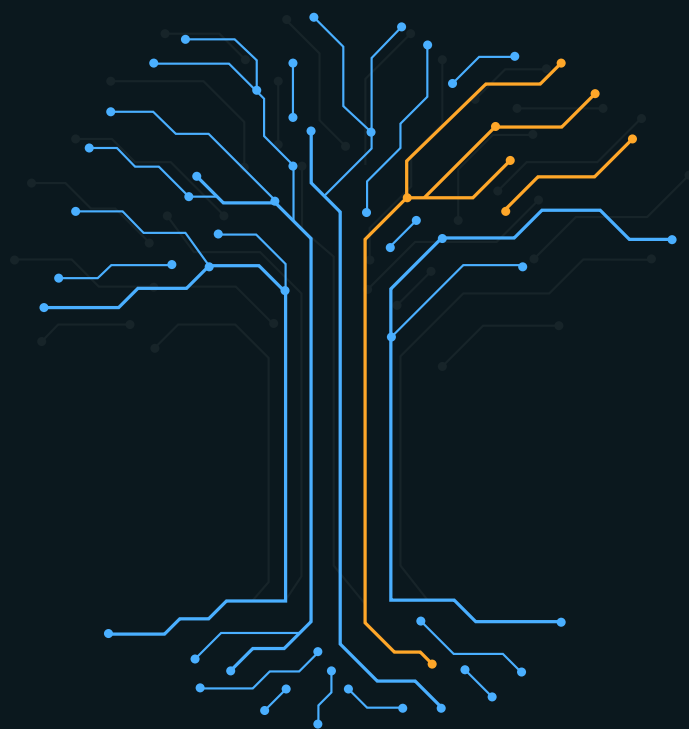
“

Despite profound restrictions imposed by a global pandemic, the QRL has continued to develop high quality post-quantum secure open source software.

The challenges of 2020 have been mitigated by a surprising appreciation of the value of crypto-assets in 2021, leaving the project in a strong position to both complete the existing roadmap and undertake additional research and development activities.

”

– Die QRL Stiftung board May 2021



Copyright © 2021