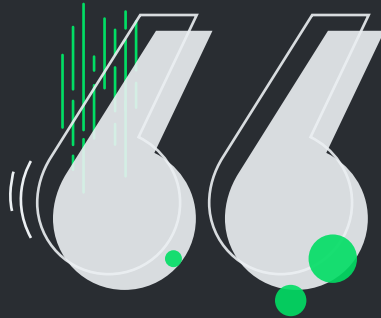


Tezos Foundation Biannual Update

September 2021



Seven upgrades prove the very resilience of the vision laid out in 2014 that allows for the sustainability and steady growth of the protocol.

This is the beauty of Tezos – its future lies in the hands of its global community.

Preface

Dear Tezos Community

The Tezos project has seen extraordinary growth and excitement since the last issue of our biannual update in March. As this digital renaissance continues to unfold, the demand for NFTs and DeFi is surging, and more people are turning to Tezos than ever before.

Tezos continues to be at the forefront of adaptability and innovation, and we take great pride in setting the standard of sustainability and security. As a liquid proof-of-stake blockchain, the low carbon footprint of Tezos means developers and users can prioritize innovation without compromising sustainability. Its low energy consumption and low gas fees are one of the many reasons why Tezos is quickly becoming recognized as the most responsible place to mint, host, and trade clean NFTs.

Companies and brands like Red Bull Racing, McLaren Racing, and OneOf have selected Tezos to build NFT experiences for their fans. They all stated they chose Tezos over other potential partners due to the network's low carbon footprint and on-chain governance.

These exciting developments of the past six months are a testament to the sustainability and security of Tezos. These technical partnerships create an exciting opportunity to expand the Tezos community.

The exponential growth in DeFi has also contributed to Tezos' growing adoption. Over the past few months alone, Tezos has been selected by several leading financial institutions, including

the European Central Bank, Societe Generale – FORGE, and more to help shape the future of their financial service. Tezos' on-chain governance is highly attractive to financial services providers, who are able to implement seamlessly and offer staking and future innovations directly to their clients, while Tezos is forklessly upgrading.

As we marked the third anniversary of Tezos, it's important to remember how far this project has come and all its incredible accomplishments. So far, Tezos has undergone seven network upgrades that have reduced gas fees by 70%, improved token standards, increased transaction speeds, and surpassed with more than 5.4 million in the month of September alone.

In this report, you will find information about the 119 grantees based in 33 different countries that have received new funding from February to July. Fifty-six percent of these projects are new to the Tezos ecosystem, and we welcome their ideas, input, and enthusiasm for Tezos.

Now, more than ever, the future of Tezos lies in the hands of where it was designed to be from the very beginning – the hands of its global community. Working together, we can draw on Tezos' past accomplishments, continue to introduce fresh, innovative ideas, and ensure that millions of people around the world can experience the most advanced blockchain in the world.

The Tezos Foundation Council

Table of Contents

Preface
3

Mission of the
Tezos Foundation
5

The Past Six Months
with Tezos
6-7

Facts & Figures 8



Grants 9

Priorities & Process
10

Grantees & Other Funded Entities 13

Research, Education,
& Core Development
Grants
14

Ecosystem – Tools
& Application Grants
19

Community Grants
39

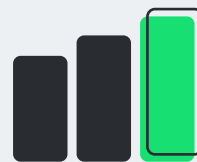
Industry Adoption 43

Industry Adoption –
Collaborations
44

A Map of the Tezos Ecosystem 47



Financials 49



Governance 53

Council & Committees of the Tezos Foundation 54



Foundation Council
55

Foundation Committees
57

Mission of the Tezos Foundation

The success of any decentralized network is determined by the efforts of a robust, diverse, and flourishing community. The Tezos Foundation exists as part of this ecosystem.



The Tezos Foundation is a Swiss foundation supervised by the Swiss Federal Foundation Supervisory Authority. Its purpose is to promote and develop the Tezos protocol and related technologies around the world. This also includes new technologies and applications, especially in the fields of the latest open and decentralized software architectures.

As highlighted in the Tezos position paper, the success of any decentralized network is determined by the efforts of a robust, diverse, and flourishing community. The Tezos Foundation exists as part of this ecosystem, alongside developers, scientists, network validators (“bakers”), enthusiasts, and many others, all working towards the success of a platform that we believe will ultimately drive innovation on a global scale.

The Tezos Foundation fulfills its mission by deploying resources that support the long-term future of the Tezos project. Grants and other capital deployment vehicles offer a strategic way to help community members, such as educational and research institutions, developers, and activists from all over the world who support the advancement of the Tezos project.

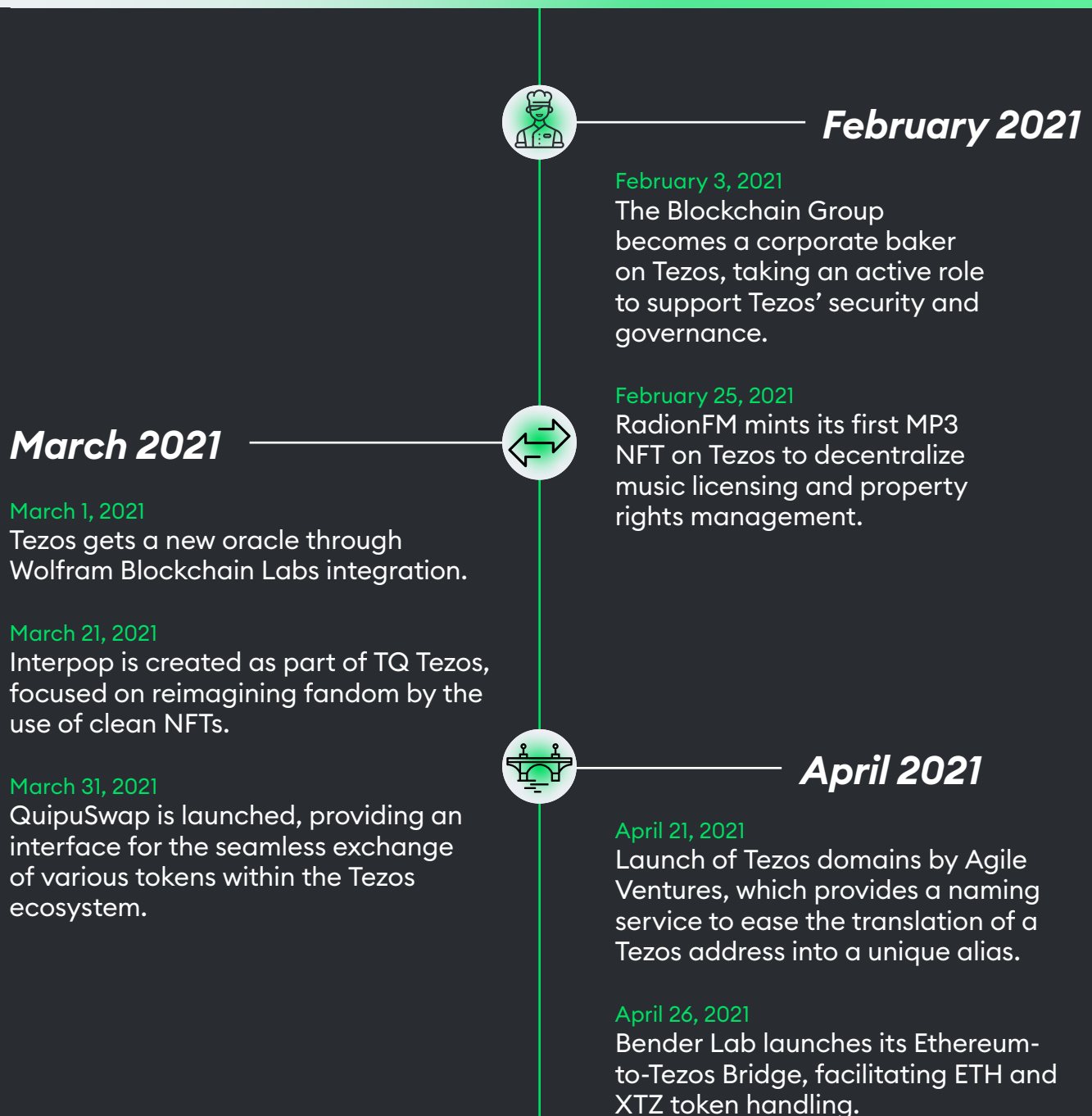
Tezos’ potential rests in the hands of its community, which is among the strongest and most exceptional in the blockchain category.

We welcome and encourage all interested parties to join the Tezos community and contribute to the project.

Tezos is smart money, redefining what it means to hold and exchange value in a digitally connected world. A self-upgradable and energy-efficient Proof of Stake blockchain with a proven track record, Tezos seamlessly adopts tomorrow’s innovations without network disruptions today. No single entity owns, manages, or controls Tezos - understanding this paradigm is essential.

The Past Six Months with Tezos

Selected Events from the Tezos Ecosystem



May 2021



May 4, 2021

SmartCrowd announces the integration with the Tezos blockchain for real estate STOs, providing the Middle East's first regulated digital investment platform for fractional ownership of real estate.

May 20, 2021

Red Bull Racing Honda and Tezos form multiyear technical partnership to utilize the Tezos blockchain for NFTs

May 27, 2021

Tezos Profiles is launched by Spruce Systems, Inc., bringing decentralized identity (DID) to the Tezos ecosystem using the latest W3C standards.



June 2021

June 8, 2021

Global leader Huge is appointed as the marketing agency to work with the Tezos Foundation for the Tezos ecosystem.

June 17, 2021

McLaren F1 Racing team and Tezos form a multiyear technical partnership to utilize the Tezos blockchain for NFTs.



July 2021

July 8, 2021

Gitcoin integrates Tezos and announces first Tezos hackathon with USD 75,000 in prizes.

July 20, 2021

Ipocamp chooses Tezos for the development of its intellectual property solution, bringing time-stamping for various types of files to the Tezos ecosystem.

Facts & Figures

Some Tezos Foundation Highlights Since March 2021

4th

independent
external audit
finalized by PwC

4 to 5

grants signed
per week

1,212

USD M in assets
(as of July 30, 2021)



233,9

USD M
committed funds

69% acceptance
rate with over 180
proposals received

Grants



Grants – Priorities & Process

A key activity of the Tezos Foundation is to deploy resources to entities and initiatives that will help to ensure the long-term success of Tezos. The Foundation is focused on three grant categories:

Research, Education & Core Development Grants

Foster innovation, development, and education about Tezos. These grants include a range of projects from online training courses to core protocol development.

Ecosystem – Tools & Application Grants

Lower barriers to entry to help make Tezos as accessible as possible for developers and end users of subsequent applications.

Community Grants

Support other organizations and initiatives that strengthen and grow the Tezos community to which the Tezos Foundation belongs.

With the launch of the Foundation's grant platform, a range of areas of interest have been published. Based on our experiences within the Tezos community, we see these areas as the most beneficial to the Tezos ecosystem at this point. We expect that they will change and be adjusted over time. While staying consistent with the overarching three categories from previous biannual reports, certain areas of interest have been added as subchapters in this iteration. They include collectibles and creator tokenization, crowdfunding, and DeFi-related projects.

The grant platform allows the ongoing submission of proposals in our areas of interest and also those that are not listed as a priority but may advance the Tezos ecosystem.

Our Grant Evaluation Process

To evaluate grant proposals, the Tezos Foundation conducts four steps, which are detailed below.

Step 1

Anyone can apply with a project at any time. The Foundation's website contains links that guide to the grant platform. [Click here →](#) Upon receipt, applications are vetted to ensure they fulfill the Tezos Foundation's formal and substantial requirements. Vetting is performed by several contributors from the Tezos ecosystem. The Technical Advisory Committee (TAC) has full visibility over reviewers and ensures adequate management of potential conflicts of interest.



Step 2

Applications that are approved through the initial review phase are sent to the Tezos Foundation's TAC for technical due diligence and evaluation. The list of current TAC members can be found on the Foundation's website. The TAC does not make grant decisions itself, but rather offers advice on an application's technological strength and usefulness to the Tezos ecosystem.



Step 3

Grant applications that receive positive recommendations from the TAC will then enter a due diligence process before the Executive Committee or the Tezos Foundation Council reaches a decision to approve, decline, or require further revisions.



Step 4

Final decisions about grant applications are communicated to applicants after they are made by the Tezos Foundation. In case a grant application is not successful, the Tezos Foundation provides summarized feedback to the applicant. Lastly, approved applicants collaborate with the Tezos Foundation to complete legal paperwork before a grant is finalized.

In some circumstances, when projects are of significant importance to the Tezos ecosystem, the Tezos Foundation will push applications through an out-of-cycle process. It is important to note that although these applications are expedited, they undergo the same due diligence process and require the same approvals.

Grants are typically paid out in multiple installments. Such installments are subject to a payment schedule to ensure that predefined milestones are achieved. The Tezos Foundation controls payments and assesses milestone reports from grantees prior to the payout of further scheduled payments. It may involve the TAC in this process if technical assessments are needed. The Tezos Foundation may not distribute follow-on payments for projects that do not hit their deliverables.



400

=



25

Securing the Tezos network and process its transactions for a year with 400 bakers required approximately the same amount of energy as the greenhouse gas emissions of 25 EU citizens per year.

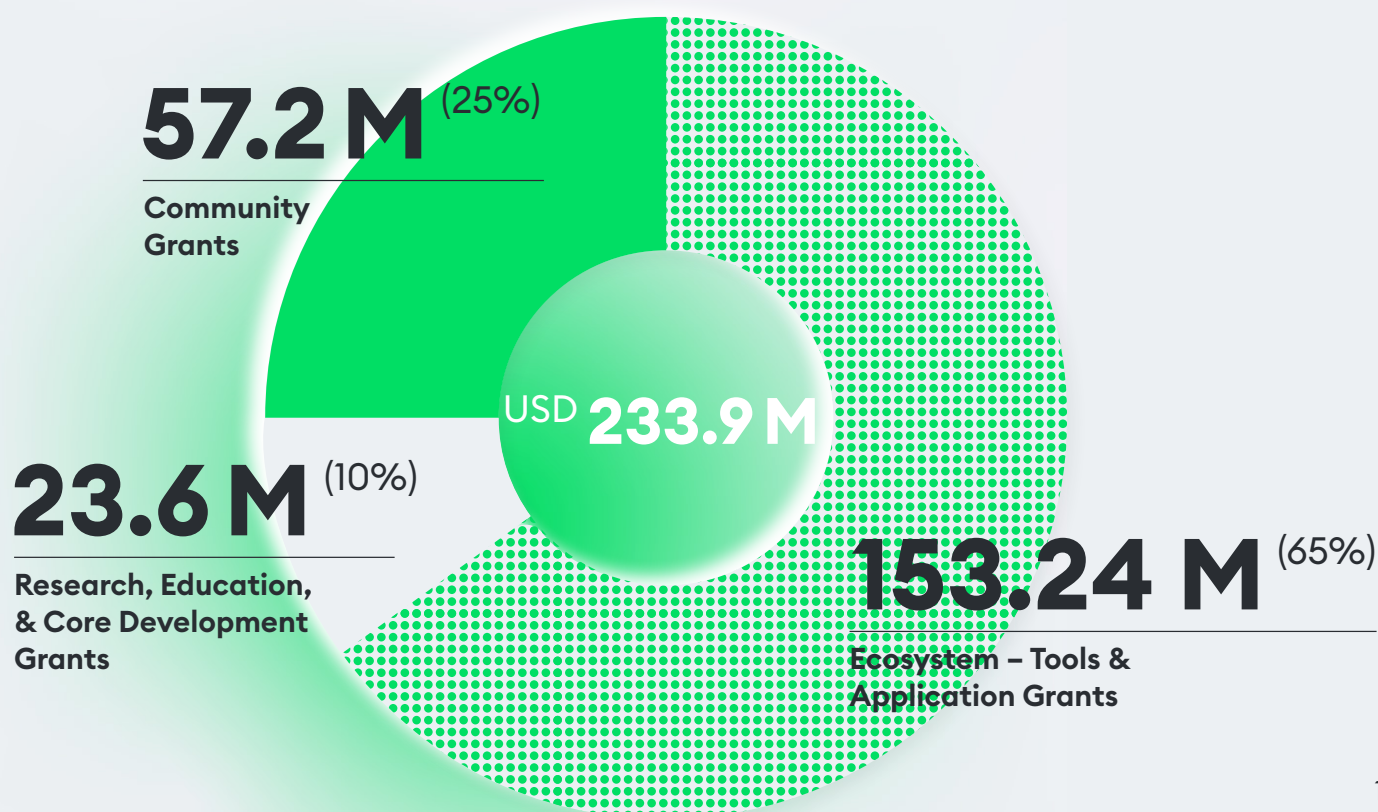
Numbers are based on estimations for bakers and transactions in 2020.

Tezos
Sustainable
Blockchain.

Grantees & Other Funded Entities

Since the last Biannual Update (March 2021), the Tezos Foundation has committed funds to 119 new projects across 33 countries for a total amount of USD 233.9 million. Sixty-seven of the 119 new grants (56%) are to organizations or individuals that were not previous grant recipients.

Some projects that previously received grants and are still active are not listed in this Biannual Update. Please see the Tezos Foundation's previous Biannual Updates for information on earlier grants. Additionally, a few agreements are not listed based on mutual nondisclosure agreements.



Research, Education, & Core Development Grants

The Tezos Foundation supports research and education about a wide spectrum of domains pertaining to computer science, such as distributed systems, cryptography, programming languages, and formal verification. A significant amount of resources are allocated toward supporting scientists and engineers at top-tier institutions and organizations around the world, as well as educational programs to train future talent. These initiatives, and others that contribute to core protocol development, are a top priority for the Tezos Foundation.

Grantees and Other Funded Entities:

Core Development

- Bolt Labs, USA
- DaiLambda, Inc., Japan
- Marigold, France
- Metastate, Switzerland
- Nomadic Labs, France
- Tarides, France

Research & Education

- B9lab, UK
- Cryptoverse Wars, India
- Dacade/Unit U+2467, Germany

- Figment Networks, Canada
- Kestrel Institute, USA
- Nagoya University, Japan
- OCamlLabs Consultancy, UK
- OCTO Technology, France
- Pretty Buttons/Stove Labs, Slovakia
- Segfault Systems, India
- Spruce Systems, Inc., USA
- Supranational, USA
- University of Freiburg, Germany
- Viable Systems, Slovakia (prev. Simple Staking, Malta)

Total: USD **23.6 M**

Contractual calculated monthly burn rate per organization and category:

- Over USD 500K
- Up to USD 200K
- Up to USD 500K
- Up to USD 50K



Tarides team

Core Development

As part of the grant program, the advancement of the Tezos protocol is supported by several decentralized core developer teams across the world. These teams work on proposals for new protocol upgrades, which are then suggested to and voted on by the bakers who validate the Tezos network.

Bolt Labs is a US-based firm that builds zkChannels to provide fast and private transactions on blockchains. By deploying privacy-preserving state channels, transactions are gathered off-chain, relying on zero-knowledge proofs and multiparty computation techniques. With their grant, Bolt Labs will enable privacy-preserving state channels on the Tezos blockchain.

DaiLambda, a Tezos core development team based in Japan, is dedicated to research and development of the Tezos core protocol and smart contracts. The DaiLambda team has extensive experience with OCaml programming language stemming from time in academia at Inria in Paris. DaiLambda contributes to the growth of the Tezos ecosystem in Japan and the greater Asia region through training and consulting engage-

ments. The grant covers the Plebia project, which targets storage optimizations for the Tezos core protocol and promotional activities in Japan.

Marigold is a French company that has grown its core developer team and works on several high-priority Tezos core protocol topics such as performance, concurrency, and codebase maintenance. The team has been supporting the past protocol upgrades and is continuously helping the development of proposed upgrades to Tezos, including quality of life improvements for developers on Tezos and work on potential Layer 2 solutions. Additionally, the team has started both an online and social media presence to update the ecosystem on their developments.

Metastate, a Switzerland-based, security-oriented entity, is dedicated to distributed ledger research and protocol development. Metastate researched and developed a number of technologies to help advance the Tezos project. Notably, they worked on consensus algorithms, privacy-preserving features, proof-of-stake and staking products, governance, smart contracts, sharding, and more. Metastate collaborated with other Tezos developers on the Delphi and Edo upgrades.

Nomadic Labs is a French research and development firm that conducts ongoing research into formal verification of smart contracts, consensus algorithms, and possible zero-knowledge cryptography implementations for Tezos. Nomadic Labs continues to work on Michelson, a domain-specific language for writing smart contracts on Tezos, as well as an additional low-level language, Albert, which will serve as a compilation target for high-level languages. The team has contributed to past protocol upgrades such as Delphi and Edo. Furthermore, Nomadic Labs collaborates with global research institutions and universities on the development of the protocol. They work together with the global Tezos developer community to support development initiatives and streamline workflows across various teams and contributors to the Tezos project.

Tarides is a French software engineering firm focusing on virtualization, distributed systems, and programming languages. Tarides is currently focusing on the integration between Tezos and MirageOS and its further development, as well as for porting and maintaining Tezos on new platforms such as Windows and JavaScript. The team also ensures long-term support of MirageOS libraries used in Tezos. Further, Tarides is actively involved in the improvement of build times for Tezos, easing the integration of Rust code with the OCaml tooling used by Tezos and more.

Research and Education

This part of grants is dedicated to supporting the long-term success of Tezos and the training of new developers. Not only are research and development teams supported, but also those that are actively reducing the barrier of entry for new teams that are joining the Tezos ecosystem through educational materials.

B9lab is a UK-based company specialized in technology adoption, enterprise learning, and consulting solutions focused on the blockchain and decentralized application space. The team received funding to develop an educational experience for developers who want to learn how to develop Tezos applications leveraging the ecosystem stack. They are building a freely accessible training course and a developer-centric continuous security offering (CSO) use case as part of their efforts.

Cryptoverse Wars is a project developed by BUIDL Labs, which is built by and for entrepreneurs, supporting them in their growth. They continue to develop the project as an interactive and fun code school that onboards developers to the Tezos ecosystem by teaching them to write Tezos smart contracts in SmartPy.

Dacade is a project by **Unit U+2467**, a multidisciplinary network of 35 strategists, developers, and designers. They were founded in Berlin in 2010 and are now distributed in four countries working on the project. It is a peer-to-peer learning network where quality educational interactions are rewarded with tokens. Dacade will become a market for Tezos knowledge and educational interactions.

Figment Networks is a Canadian company working on Web3 solutions. Their team is aiming to help make Tezos' application development a more seamless experience for software engineers. One of their initiatives is Figment Learn, a learning platform where they integrated Tezos as a pathway for the community to learn about Tezos and how to use different tools that were built by the ecosystem.

Kestrel Institute, based in the USA, is a nonprofit research center for computer science. Their team is formally verifying the functional correctness of the R1CS implementation of Jubjub elliptic curve operations described in the Zcash Protocol Specification. Their work will be used for Tezos' core development in collaboration with Nomadic Labs.

Nagoya University is one of the most elite higher education institutions in Japan. Jacques Garrigue, a professor at the Graduate School of Mathematics is working on the Certifiable OCaml Type Inference (COCTI) project to make OCaml type inference more robust, modular, and verifiable by modularizing the OCaml type checker using constraint-based type inference and certifying it using the Coq proof assistant. Further, the grant will support the teaching of blockchain and verification-related topics which include technical courses on Tezos technology in collaboration with DaiLambda and other Tezos teams in the Greater Asia region.

OCaml Labs Consultancy is a top-tier functional programming and multidisciplinary computer science team based at Cambridge University in the UK. With this grant, the OCaml Labs team will migrate the Tezos codebase to the new duniverse build system, which will help improve the speed of Tezos builds and smooth the development workflow for developers. OCaml Labs is working with researchers at the Indian Institute of Technology (IIT Madras), one of the foremost institutes of national importance in India in higher technological education and applied research, on this project.

OCTO Technology is a French consulting and IT implementation firm within Accenture Digital. The OCTO team previously built Tezos Link and improved Tezos Academy, a freely available online platform that teaches LIGO smart contract development in an entertaining and user-friendly manner. Furthermore, OCTO developed Tezos Land, an open-source boilerplate for a digital collectibles marketplace on Tezos. Recently, they also published OpenTezos, a clear and exhaustive training covering developer resources to foster adoption of the Tezos blockchain.

Pretty buttons/Stove Labs is a firm based in Slovakia that is building Tezos School, a comprehensive and up-to-date curriculum of content for developers to learn how Tezos can be utilized. They promote this project, including the development of use cases to be taught. The team is further collaborating with several entities across the Tezos ecosystem, which helps them in building Tezos School to reflect real-life use cases from their work.

Reason Association is growing the ReasonML community by producing and disseminating more effective learning materials and tools. The association builds new documentation to teach JavaScript developers Reason and OCaml and to improve the developer experience for existing users. This includes Tezos-related content as well as resources and tools to help encourage the ReasonML community to get involved in the Tezos ecosystem.

Segfault Systems is a deep tech startup founded in Chennai, India. Segfault Systems solves complex problems in scalable systems using type-safe programming language abstractions. They lead the development of the Multicore OCaml programming language and its associated developer tools. With this grant, Segfault Systems supports the ecosystem by building multicore functionality for Tezos.

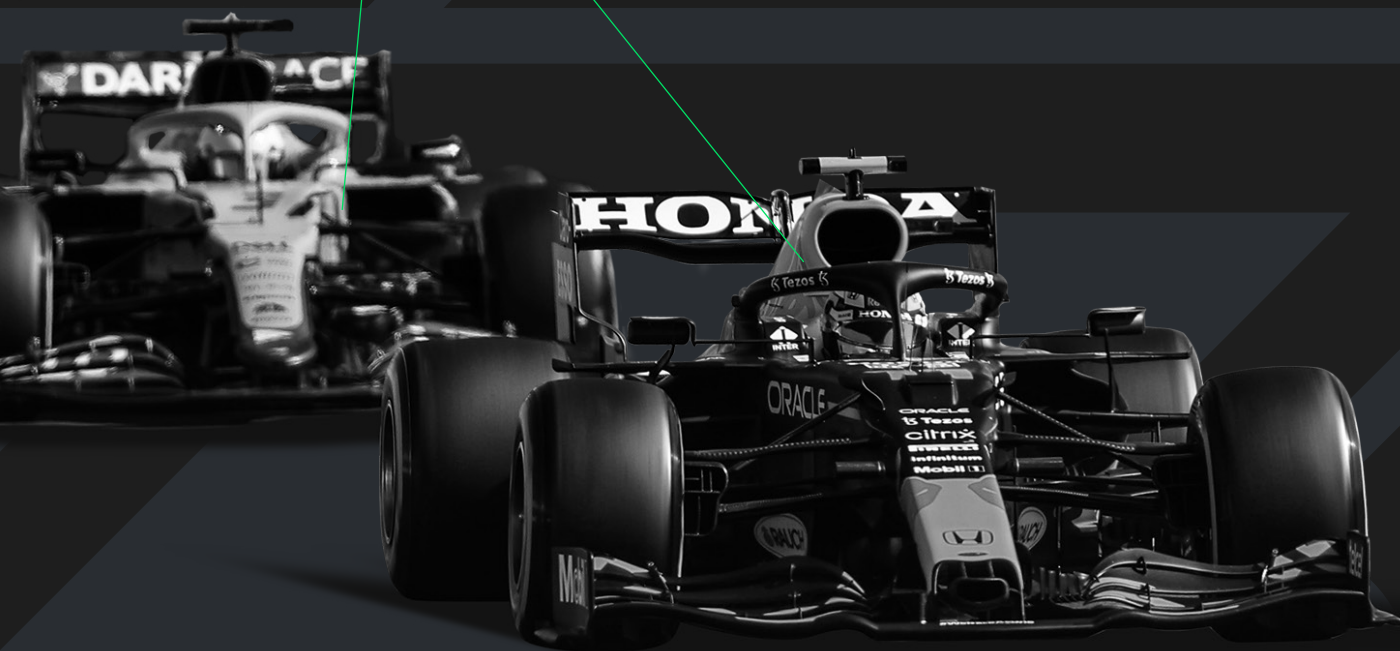
Spruce joined the Tezos ecosystem to build a digital and self-sovereign identity solution on Tezos. This US-based team is working on a mobile application as a credential wallet, a Web2 and Web3 application/platform for credential issues, verifier tools, an ecosystem steward portal, and several infrastructure deliverables such as identity bridges and SDKs.

Supranational (VDF Alliance) is a collection of world-class academic, nonprofit, and corporate collaborators building open-source hardware for the blockchain ecosystem. The Tezos Foundation joined the VDF Alliance to support research and development that will hopefully improve the security and scalability of blockchain protocols like Tezos.

Freiburg University is the fifth-oldest university in Germany and has a long tradition of teaching the humanities, social sciences, natural sciences, and technology. It enjoys a strong academic reputation both nationally and internationally. Professor Peter Thiemann, full professor of Informatics, received this grant for Contract Orchestration for OCaml (COOC), a project to ensure a smooth interaction between OCaml and Michelson and to provide a framework that guarantees the correct orchestration of contract invocation from an application program in the OCaml language.

Simple Staking is now developing out of the new firm **Viable Systems** based in Slovakia. In their research and core development-related work, the team is contributing to Tezos on core development by increasing determinism and stability, increasing performance through storage optimizations, and supporting the developer community by improving interactions with storage and Tezos nodes.

*Red Bull Racing and McLaren Racing
are building their energy-efficient
digital fan experiences on Tezos.*



Tezos
***Sustainable Digital
Fan Experiences.***

Ecosystem – Tools & Application Grants

The Tezos Foundation supports many teams that are building tools to help developers of varying skill levels build novel applications on Tezos and contribute to the growth of its ecosystem. To date, the Tezos Foundation has focused on eight main areas within this grant-making category: programming languages and libraries, block explorers and analytics, smart contract development, infrastructure, applications, collectibles and creator tokenization, crowdfunding, and decentralized finance.

Grantees and Other Funded Entities:

Programming Languages and Libraries

- Edukera, France
- LIGO, France
- Luiz Milfont, Brazil
- Madfish Solutions, Ukraine
- MoneyTrack, France
- MyTezos LLC/Sotez, USA
- NEOFACTO, France
- Nomadic Labs, France
- Viable Systems, Slovakia (prev. Simple Staking, Malta)

Block Explorers and Analytics

- Attic Lab/Everstake, Ukraine
- Baking Bad, Russia
- Blockwatch Data, Germany
- Papers/AirGap, Switzerland

Smart Contract Development

- Anchor Labs, USA
- Baking Bad, Russia
- Biconomy, Singapore
- DaiLambda, Inc., Japan
- Guillem Rieu, France
- Johann Tanzer, Austria
- Korea University, Korea
- Runtime Verification, USA
- Serokell OÜ, Estonia
- Truffle Blockchain Group, USA

Infrastructure

- Ateza LLC, USA
- Attic Lab/Everstake, Ukraine
- Bakin'Bacon, USA
- CapBridge Financial Pte Ltd., Singapore
- Chainstack, Singapore
- Cobo, China
- Cryptocount, USA
- Cryptonomic, USA
- cryptokarpak, Estonia
- Crypto Storage AG, Switzerland

Infrastructure (cont.)

- dOrg, USA
- DSENT AG, Switzerland
- ECAD Labs, Canada
- Equisafe, France
- Figment Networks, Canada
- Fireblocks, Israel
- FutureSense, Korea
- Global P.O.S./Global Soft SAS, France
- Gravity, France
- ImToken/Hangzhou Rongshi Technology Ltd., China
- Kalima, France
- KoineArth, Singapore
- Kukai, Sweden
- Metaco, Switzerland
- MIDL.dev, Estonia
- Opsian, UK
- Papers/Airgap, Switzerland
- Shareable Asset, Singapore
- SmartChain/Aqar Chain, UAE
- Smart Chain Arena, USA
- Solvuu Inc., USA
- Soulmachine Ltd., UK
- Sylo/DN3010 Ltd., New Zealand
- Taurus, Switzerland
- TezQuery, France
- Tocqueville Group/TQ Tezos, USA

Applications

- Agile Ventures, Czech Republic
- Atlas One, Canada
- Bitfortip, Greece
- BlockchainXdev, France
- Blockcurators GmbH, Germany
- Botwars Ultimate Trading/Quazard Ltd, UK
- BountyBlok.io, Canada
- Chain of Insight, Canada
- CHAINBREAKERS LLC, USA
- CoEnzyme SAS, France
- Diginex Solutions, Hong Kong
- Electis, France
- IBF Net Ltd., Malaysia
- Metaculus, USA
- MVL Foundation, Singapore
- Talao SAS, France
- Tangany GmbH, Germany
- Wolfram Blockchain Labs, USA
- Xcap Ecosystem Ltd/Ownera, UK
- Zondax, Switzerland

Collectibles and Creator Tokenization

- Amplify Creative Group, Inc., USA
- Hicetnunc2000, Brazil
- independent freelancer
- McLaren Racing, UK
- Mozik/Shanghai Kefeng Information Technology Ltd., China
- NFT Genius, USA
- ONEOF, USA
- Open Block Ventures LLC, USA
- Ozone Networks, Inc., USA
- Papers, Switzerland
- Queens Ballpark Company
- RedBull Racing, UK
- Savitribai Phule Pune University, India
- Vyking, Germany
- Vertical Crypto Art, UK

Crowdfunding

- Gitcoin, USA
- Kickflow, India
- Smart Crowd, UAE

Decentralized Finance (DeFi)

- Alternative Derivatives Exchange, UK
- Bender Labs, France
- camlCase, USA
- Ejara/Nzinghaa Lab, Cameroon
- Madfish.solutions, Ukraine
- OpusDei (working title), Estonia
- Papers, Switzerland
- Stably, USA
- Smart Contract Labs, Estonia
- Wealthchain Inc., USA

Payment Solutions

- CryptoTask, Croatia
- Ejara, Cameroon
- Hexa Solutions, France
- Mt Pelerin, Switzerland
- Ohana Labs Pte. Ltd., Canada
- RADION FM, USA
- Ramp Swaps Ltd., UK
- Shuttle One Pte Ltd., Singapore

Total: USD **153.24 M**

Contractual calculated monthly burn rate
per organization and category:

- Over USD 500K
- Up to USD 200K
- Up to USD 500K
- Up to USD 50K

Programming Languages and Libraries

In order to make Tezos as accessible as possible, the Tezos Foundation supports engineers in creating open-source software that helps lower barriers to entry to Tezos development.

Edukera is a France-based company focusing on smart contract security. The team contributes to Tezos' smart security efforts through Archetype, a domain-specific smart contract language focused on security for the Tezos blockchain. They received a grant from the Tezos Foundation to further this project and contribute to the formal verification process for Archetype smart contracts.

The **LIGO** team based in France is advancing their work on the LIGO project with the objective to turn it into a widely adopted and well-supported tool. LIGO is a friendly smart contracts language designed for developing larger contracts than those written in Michelson. They continue their advancements including overall maintenance, front end (e.g. better transpilation between syntaxes), middle end (e.g. improvements to the typer), and back end (e.g. increasing the amount of parts moved to Coq).

Luiz Milfont is helping in advancing the Tezos project and adoption in Brazil. He received a grant for creating libraries in programming languages so that Tezos may be present in several programming environments and frameworks including educational initiatives targeting the Portuguese-speaking audience.

Madfish Solutions is a Ukrainian software development company working on several projects to help advance the Tezos ecosystem. As part of this category, they are improving the eth2tez (sol2ligo) transpiler to help developers migrate smart contracts from Solidity to LIGO.

MoneyTrack is a France-based team building a payment platform for directed currency that combines the world of traditional payment with the guarantees of control, traceability, and irreversibility of blockchain. As part of their efforts on Tezos, they are developing a Dart library for Tezos to facilitate developers' adoption and remove friction in dApp development.

Nomadic Labs continues to maintain Michelson, which is the programming language for Tezos smart contracts and was designed with formal verification in mind. Even though it is a rather low-level, stack-based language, its static type system eliminates a whole class of programming errors before the execution of smart contracts. Nomadic Labs also works on Albert, an intermediate smart contract programming language intended to serve as a compilation target for high-level languages. Furthermore, Nomadic Labs maintains Mi-Cho-Coq, a specification of Michelson using the Coq interactive theorem prover. This provides a formal specification of the syntax and semantics of Michelson, as well as a framework to verify smart contracts.

A blockchain is only as strong as the people in its community.



Viable Systems

MYTEZOS, LLC is the company of the US-based Tezos developer working on **Sotez**, a bare-bones JavaScript library for interacting with Tezos. The firm received a grant to continue development on Sotez and also to contribute to Taquito, a TypeScript library suite for development on Tezos.

NEOFACTO is a consulting firm that comprises over 80 members with offices in France, Luxembourg, and Belgium that support companies with their digitization initiatives. As part of their offering, they provide blockchain consulting and application development. The team received a grant to contribute to the Tezos project by developing and releasing a Java connectivity toolbox (EJ4Tezos) to help boost the adoption of Tezos in the enterprise world.

Viable Systems is the new name of **Simple Staking**, a Slovakia-based firm that continues to build TezEdge, a Tezos node in the Rust programming language, that focuses on security. They collaborate with Nomadic Labs and the larger Tezos developer community on the project. With a Tezos node in Rust, the ecosystem profits from a higher diversity of node implementations and further increases decentralization and robustness of the network.

Block Explorers and Analytics

The Tezos Foundation has also made it a priority to fund the development of open-source block explorers and other tools to help community members analyze the Tezos blockchain.



Blockwatch Data team

Attic Lab/Everstake is receiving funding for several projects. As part of their efforts, they are building and improving TezTracker, a Tezos block explorer, and a Tezos multisig wallet. The Ukrainian firm received a grant to build and deploy both the back and front ends of the block explorer, while relying on an existent, efficient, and publicly available indexer.

Baking Bad is a Russian Tezos development team that builds a variety of widely used products in the ecosystem. The team is active in numerous fields and products on Tezos. In the area of block explorers, they continue to work and improve both TzKT and Better Call Dev. This includes not only their indexer functionality and the necessary changes to support protocol upgrades, but also the adjustments to recent developments in the ecosystem such as the exponential growth in NFT and DeFi-related activities.

Blockwatch Data, which is based in Germany, accelerated the development of TzStats, a popular Tezos block explorer, and its underlying blockchain indexer, tzindex. In addition to ensuring compliance with future protocol upgrades, TzStats also allows users to track Tezos-based assets and popular tokens.

Papers is an active development team that powers the **AirGap** wallet in the Tezos ecosystem. The Papers team, based in Switzerland, continues to improve tezblock, a Tezos block explorer, by adding more advanced baking and governance data through integration with Tezos Agora, Tezos smart contract and asset support, and other key metrics and data visualizations.

Smart Contract Development

Tezos supports institutional-grade smart contracts. The Tezos Foundation funds tools to help lower barriers to entry for Tezos smart contract development and the applications that will follow.

Anchor Labs is a US-based team that is working on bringing Golang support to Tezos' smart contracts. They are working on expanding the scope of Anchorage's open-source library to support creating and invoking contract scripts in the Go language.

In addition to other projects covered in this report, **Baking Bad** works on Atomex STO Gate, a collection of flexible program modules to provide various atomic swap implementations for digital securities (security tokens) and other Tezos asset standards.

Biconomy is focusing on Web3 applications and developing a meta transaction protocol for Tezos. They develop a TZIP and collaborate with other Tezos developers in the ecosystem on a standard for smart contracts to support meta-transactions. Their goal is to leverage gas-optimized meta transactions and develop a client-side SDK that allows developers to easily plug into the relay infrastructure to leverage meta-transactions.

DaiLambda, a development team based in Japan, is actively contributing to lower the burden of developing high-quality smart contracts using formal methods. This will include establishing a concept of a Typical Smart Contracts (TSC) Agency and building an open-source prototype for such a platform. The platform will be a web application where visitors follow an intuitive and informative wizard to create a smart contract generated from one of many templates provided.

Guillem Rieu is working on the PeerPatron platform and related open-source tools with the goal of developing a Tezos-based alternative to conventional crowdfunding platforms like Patreon. In this project, he will also release templates for dApps and smart contracts as well as tutorials and full documentation. Guillem Rieu is based in France.

Johann Tanzer, based in Austria, is the lead developer of Tplus, a tool that helps developers manage Tezos environments (sandboxes and public nodes) to lower the barriers for development on top of Tezos. He received a grant to incorporate existing open-source projects and libraries into Tplus, improve its user interface (UI) and user experience (UX), and promote its use and adoption in the community.

Korea University has a total enrollment of more than 36,000 students and is one of the oldest institutions of higher education in the country.

Hakjoo Oh is an Associate Professor in the Computer Science department and received a grant to build a fully automated tool to verify and test the integrity of smart contracts written in Michelson.

Runtime Verification is a US-based company that uses runtime-verification-based techniques to improve the safety, reliability, and correctness of software. The team is supporting the Tezos ecosystem through numerous smart contract audits. In addition, the team is developing a Firefly client for Michelson that can present coverage information directly over the Michelson code.

Serokell OÜ is a software development company focused on creating customized high-performance solutions. The Estonian-based blockchain company is responsible for developing and maintaining various developer tools and Tezos smart contracts including efforts around stablecoins

and wrapped assets. Additionally, they also help in the maintenance of several tools and platforms in the ecosystem such as Tezos Agora, Kiln, and the TZIP explorer.

Truffle Blockchain Group powers the world-class development environment Truffle Suite. The US-based team received a grant to achieve its objectives with regard to contributing to the Tezos project by supporting the development of a software program that implements Tezos support for the Truffle smart contract development tool. Truffle support will be added for the SmartPy programming language. The team will also create a proof-of-concept, Tezos-flavored Ganache.

Infrastructure

Infrastructure is essential to a thriving blockchain ecosystem. In the case of Tezos, projects building critical infrastructure like financial primitives and asset standards make it easier for developers to use these public goods to build novel applications on Tezos.

Ateza LLC is a US-based team developing a global, load-balanced application programming interface (API) with end-to-end encryption to interface with the Tezos nodes. The goal of the API is to help strengthen the Tezos infrastructure to facilitate development of applications that interface with the Tezos distributed ledger.

Attic Lab/Everstake is a Ukrainian team working on several projects for which they receive funding. As part of their efforts for Tezos' infrastructure, they are operating and maintaining the Tezos Giga Node for a reliable and stable operation of the Tezos ecosystem. Furthermore, they are building a Tezos multisig wallet web application making use of several open-source components in the ecosystem such as Papers' developed Beacon.

Bakin'Bacon is a US-based project working on a desktop-based baking solution. They are developing and maintaining a simple, GUI-based application to allow not as tech-savvy people to set up their own bakery and manage reward payouts. The project aims to cover the popular operating systems.

CapBridge Financial Pte is a Singapore-based company that provides private market solutions to help companies and investors unlock value via a uniquely integrated primary syndication and secondary trading approach. CapBridge is contributing to the Tezos project by enabling the direct updating of unlisted (private) companies' share transfer transaction information to the national registry, thereby eventually allowing any unlisted entity to elect themselves to be "privately traded" with user-defined selected groups/shareholders.

Chainstack is a Singapore-based company that helps companies from start-ups to large enterprises to build, run, and scale blockchain applications. The team has extended their offering with Tezos mainnet and testnet infrastructure. They provide a managed services offering to deploy self-enclosed and self-sufficient private networks, public Tezos nodes including Tezos community support, where they support developers in the ecosystem as well as Tezos-specific business development efforts such as meetups and webinars.

Cobo is a leading crypto wallet based in China. Next to their integration of Tezos, they publish region-specific material to increase the awareness of Tezos. Their efforts include the company's custody solution, which increases touchpoints of institutional clients with Tezos.

Cryptocount is the company and project of a US-based developer working on proof-of-stake, reward-related Tezos projects. He has been developing a tool for bakers to build taxation reporting, which he is now improving under the name Cryptocount, including improved UI and UX design for its users.

The user **cryptokarpak** is Estonia-based and received support for his activities in the Tezos community. They are actively supporting new members in the ecosystem as well as in the region.

Cryptonomic builds infrastructure solutions. The US-based firm provides tools and smart contracts that enable higher-level decentralized and consortium applications. The firm develops oracle services on Tezos via Chainlink, including ongoing maintenance and community engagement, with

which they will touch on existing projects such as their Arronax block explorer. Adding to this, they are also in charge of maintaining Galleon, Conseil, and ConseilJS, as well as having regular alignments with Tezos ecosystem teams.

Crypto Storage is a Swiss company that is part of the Crypto Finance Group. Their offering provides institutional and professional investors products and services with a level of quality, reliability, and security that is unique in the digital asset space today. The Group provides asset management, with the first regulated asset manager for crypto asset funds authorized by FINMA, as well as brokerage services for 24/7 crypto asset trading, and crypto asset storage infrastructure and tokenization solutions. The team integrated Tezos' FA1.2 and FA2 token standards as well as delegation functionality into their system for their client's projects, adding to the already existing support of Tezos.

The launch of these Tezos use cases for the financial sector make innovative, compliant on-chain financial products a reality today.

Crypto Finance AG (Crypto Finance Group)



dOrg is a full-stack freelancer agency based in the USA building and running on Web3. The team designs and develops Homebase, an app for creating and interacting with DAOs using the BaseDAO framework on Tezos.

DSENT, which is based in Switzerland, is working on tokengate.io, a token issuance platform on Tezos, including payment via Tezos tokens. Their product focuses on institutional clients such as banks that want to make use of tokenization. The firm received a grant to build a token wallet generation tool as well as the integration of the FA2 token standard in their platform.

The Canadian firm **ECAD Labs** delivers and manages projects in the areas of software development, systems engineering, open-source development, and developer support. ECAD Labs develops a Grafana data source plug-in for Tezos and improves Signatory, a Tezos remote signer. ECAD Labs is also involved in the development of Taquito, a popular TypeScript library suite for development on Tezos as well as in advancing the Tezos indexer library by Nomadic Labs to make it better suited for mass adoption. Furthermore, the team has started a project under the working title Taquira, a dedicated Tezos blockchain development suite.

Equisafe is a French company that develops a solution for unlisted companies to manage their investors and investments as well as support throughout the tokenization of assets on Tezos. Their product is – among others – used by start-ups, real estate companies, and investors. The team is implementing the FA1.2/FA2 standards into their platform.

Figment Networks is a Canadian company working on Web3 solutions. Their team is aiming to help make Tezos application development a more seamless experience for software engineers. With the grants, they integrated Tezos into their Hubble Web3 explorer, a high-level analytics, alerting, and governance tool for the Tezos ecosystem. They are further integrating Tezos into Data Hub, a “full-nodes-as-service” offering to make it easier for developers to access Tezos blockchain data via an API.

Fireblocks is an Israel-based company that develops and operates their digital asset custody, transfer, and settlement platform. Their platform uses multiparty computation (MPC), and they have integrated Tezos’ native token, including the support for delegating, and are building tokenization capabilities using the FA1.2 and FA2 token standards.

FutureSense is incorporating Tezos in its efforts with the NIA National Police Agency in Korea, including a DID subsystem, data integrity subsystem, and a token-based data marketplace. With its efforts, the team is collaborating both technically and on a communication level with Tezos ecosystem members such as Nomadic Labs and TZ APAC. A first phase has been finalized and a second phase is in process.

Global P.O.S is the project by **Global Soft SAS**, a French company working on the integration of Tezos into their Easy2PlayWallet cryptocurrency wallet and making tez usable for payments at its point-of-sale locations internationally.

Gravity is a France-based team that developed a solution allowing individuals and small businesses to bring together verifiable data about themselves in a digital wallet and build trusted digital identities that are private, portable, and persistent. As a digital identity project, they are in collaboration with Spruce ID, during which they are building an open-source ID stack for humanitarian organizations. Part of their Foundation-supported work is the integration of Tezos-based DIDs and verifiable credentials into the RedRose system used by NGOs worldwide.



Gravity team

imToken is a project by **Hangzhou Rongshi Technology Ltd.** that developed one of the most popular wallets in the Asian region. The team, which is based in China, not only worked on the integration of tez into their solution, but also on contributing to the network by running a public baker for its users and supporting communication efforts in the Asian market.

Kalima Systems is a France-based company. The team is working on interconnecting the Kalima blockchain with Tezos. Their solutions are focused on Internet of Things solutions and offer their clients mixed private and public blockchain solutions. Through large-scale industry partnerships their products are supporting the adoption of Tezos in the enterprise sector.

The Singaporean **KoineArth** built [markets]N, a blockchain and AI-based, ERP-compatible solution for organizations to work together in a collaborative business-to-business (B2B) marketplace that creates end-to-end visibility and integrates into business processes and vendors on one scalable and distributed platform. The team builds this marketplace on Tezos, including using the FA2 token.

Kukai by Klas Harrysson Consulting and their team in Sweden is a popular wallet for Tezos-based assets. One of its features is the ability to use DirectAuth, allowing users to create wallets through their social media accounts. The team has received a grant to proceed with their development of the wallet, including UX and UI improvements, integration with dApps such as popular decentralized exchanges, mobile device solutions, and more smart wallet features. The team is actively implementing new features based on community and developer feedback.

Metaco, a Swiss firm, provides custody solutions for financial institutions to manage digital assets with their SILO platform. As part of this, the firm received a grant to support both the Tezos blockchain and its native token in the SILO platform, including changes in the front end, back end, storage solutions, and the support of delegation and baking. The grant allows Metaco to integrate the Tezos token standard (e.g. FA2) in SILO clients' digital securities using Tezos as the underlying technology.

MIDL.dev is an Estonian firm providing staking as a service solution for building an open-source suite of Tezos infrastructure tools. Part of their offerings include the popular page xtz-shots.io, an easy way for bakers to import snapshots of the Tezos blockchain. They offer solutions providing the infrastructure against a fixed fee, allowing clients to stake directly. MIDL.dev has simplified the process to implement a complete baking infrastructure as code in a replicable and secure

manner, consequently lowering the barriers to entry for aspiring Tezos bakers. Adding to this, they are also working to implement Idealized Payouts as well as further improvements for the baker's popular "Tezos Reward Distributor" tool.

Opsian is a UK-based company with an office in Cambridge. The team is working on a project to enable continuous monitoring and profiling of Tezos. The goal is to allow the Tezos ecosystem to understand the application and system performance of Tezos nodes. The project includes default-on metrics, low-overhead instrumentation, and continuous profiling of the OCaml runtime in Tezos in the way that the data is ingested, indexed, and aggregated in public dashboards.

Papers collaborates with other Tezos development teams and created a wallet interaction standard to help users interact with applications built on Tezos from their browsers. Using this standard, a widely used browser extension, Beacon, has successfully been developed to allow any application developer to easily incorporate a wallet via a generic implementation. The Switzerland-based team has contributed to numerous projects in the ecosystem. Besides the projects mentioned in other parts of this report, they have integrated Sapling into **AirGap**, a wallet solution, and are further working on Cryptostars, an easy to use project to manage kids' allowances on Tezos, as well as several building blocks for the developer community such as a deposit contract compatible with FA1.2/FA2.

Shareable Asset is a team and asset platform from Singapore. The team has integrated Tezos as well as the FA2 token standard with the goal to offer real estate-backed tokens in their iOS- and Android-based application, which also functions as a wallet.

SmartChain/Aqar chain is a technology organization domiciled in Abu Dhabi in the UAE with presence in Saudi Arabia that has built a platform called Aqar Chain. They are the first in the Gulf Cooperation Council (GCC) to tokenize real estate property using blockchain technology and offer fractional ownership through crowdfunding for retail investors. Their tokenization platform uses Tezos' FA1.2 token standard.

Smart Chain Arena, based in the US, is the team behind SmartPy. They have received previous grants and are now focusing on improving existing features and new development. Among others, these efforts include the support of Tezos' upgrades, the ability to easily add metadata to contracts (TZIP-16), lazy and updateable entry points, the integration of Temple (prev. Thanos) to smartpy.io, and SmartML and SmartJS editors. Furthermore, they are contributing to the support of oracle services via Chainlink.

Soulmachine is a team from the UK contributing to the Tezos project by integrating the Tezos protocol into OroPocket, a venture of SoulMachine for tokenizing gold and silver assets and enabling swift transfer of these tokens between wallets. The developments include the creation of a wallet supporting Tezos on the OroPocket platform for users enables transfer of tez, gold, and silver tokens, allowing users to instantly buy and sell such tokens.

Solvuu is a US-based team focused on the programming language OCaml and its online presence. The team is selecting a new implementation technology for ocaml.org and porting current content to the new implementation of the site, integrating the OCaml Manual into the site, as well as delivering ongoing maintenance and enhancements.

Sword France is a French company that is currently running a corporate baker. Based on their experiences, the team has started the development of a project called "Choose Your Baker". This project aims to release a communication protocol enabling issuers of Tezos transactions to select the baker they want to send their transactions to. This topic is of particular importance for the compliance department of financial institutions working in the security tokens space.

Sylo is a project by New Zealand-based **DN3010 Ltd.** that is building the Sylo Smart Wallet, an application that combines a digital asset wallet with a decentralized private messenger. The team integrated Tezos into their smart wallet in late 2020 and is further working on both a FIAT on-ramp as well as providing baking services. The Sylo Smart Wallet uses a decentralized communications protocol and messaging platform that has a built-in smart wallet for sending secure crypto payments and messages between users.

Taurus is a regulated Swiss financial services company building a next-generation platform to trade, invest, and protect digital assets with a FINMA securities dealer license. Taurus is also a leading B2B service provider in Switzerland for cryptocurrency custody. The team integrated the Tezos protocol as well as the FA1.2 and FA2 standards into their infrastructure, which is actively used on their digital exchange. The integration speeds up the adoption of the protocol by providing robust and trusted infrastructure targeting institutional players and providing secure access for Tezos to some leading financial institutions.

TezQuery is a project developed by a team in France. It builds and maintains a query engine that evaluates not only SQL queries, but also powerful (recursive) queries on the graph structure of the Tezos blockchain.

Tocqueville Group, also known as **TQ Tezos**, houses a technology team building Tezos-based solutions and open-source software for enterprises and developers. In collaboration with other Tezos developers, the team spearheaded the development of a standard for a unified token contract interface, supporting both a wide range of token types and multiasset contracts. Furthermore, the team focused on the development of DAOs, baking software, reference applications, and private versions of Tezos in collaboration with other ecosystem teams. TQ Tezos cooperates alongside ecosystem teams such as Truesy, Interpop and Blokhaut.



Blockchain Xdev team

Applications

Tezos enables new types of applications, which can address problems that have been traditionally difficult to solve using legacy software stacks. The Foundation supports new applications that drive wide adoption and benefit standardization, censorship resistance, or user control on the Tezos protocol.

Agile Ventures, based in the Czech Republic, is an in-house software development team and consultancy group that has worked on a number of Tezos projects since 2016. Continuing from their work on TaaS, the team continues working on bringing GraphQL subscriptions on top of Tezos, which received the name TezGraph. TezGraph is a simple, highly compatible, and reliable open-source API that provides access to historic and real-time Tezos blockchain data with the convenience of GraphQL. To achieve this, the team is collaborating both with ECAD Labs and Nomadic Labs. Besides these developments, the team is actively working on the popular Tezos Domains project. Tezos Domains is a dApp where users can participate in domain auctions and manage their domains as well as load-balanced and geo-redundant deployment of the Tezos Domains indexer and publicly available API.

Atlas One is a Canadian company focusing on digital securities for private capital markets. The team is using Tezos as the underlying technology of its platform for the purpose of structuring, creating, issuing, distributing, and managing digital securities and digital security offerings (DSOs).

Bitfortip is a social rewards network based in Greece that makes use of cryptocurrency payments as financial incentives. Upon registration, users get a unique Tezos address where they will be able to deposit funds and then post inquiries without photos on the platform via the website or through the smartphone app. When an inquirer marks an answer as correct, the other party will see their balance credited.

Blockchain Xdev is a France-based company building several projects across fields on Tezos. In this project, the team is developing a blockchain-based, multipartner platform for certification and sharing of vehicle data powered by the Tezos blockchain. The project the team is working on not only increases adoption of Tezos in enterprises and corporate firms, but also aims to develop open-source building blocks for the developer community.

Blockcurators GmbH, which is based in Germany, is a software development firm that, among other things, focuses on blockchain and cryptocurrency. They received a grant for integrating Tezos into their CoinKit TipBot and for providing related support to offer tipping of tez (Tezos tokens) through the bot across a variety of platforms such as Twitter, Discord, Slack, and Telegram.

Botwars Ultimate Trading is a UK-based project of **Quazard Ltd** that teaches players through games how to trade responsibly in a fun and innovative way. In Botwars, you are the captain of an army of trading robots and it is your job to lead them to victory by conquering the cryptocurrency markets.

BountyBlok.io, based in Canada, is a gamification platform used by third-party applications to create challenges and tasks that can easily integrate with their existing product supported through an integration via Zapier. Challenges completed, achievements, XP points earned, etc. are tracked on-chain.

Chain of Insight is a Canadian builder of decentralized tools and blockchain gaming. The team built Tezos-based puzzle games and is currently working on Project Uanon, a puzzle game on Tezos with several stages. The game will include Tezos-based NFTs and will play over several months through engaging stages.

CHAINBREAKERS LLC are the US-based company behind tzstamp, an open-source Tezos notary service. tzstamp is a cryptographic timestamping service that uses the Tezos blockchain to prove a file existed at or before a certain time.

CoEnzyme SAS is a France-based company focused on developing applications on Tezos in the realm of gaming. This includes the creation of building blocks for the ecosystem such as on-chain reusable assets or exemplary games based on popular examples with the goal to make them usable in platforms such as iOS and Android while showcasing the use of popular libraries such as Taquito.

The Hong Kong-based company **Diginex Solutions** drives institutional adoption of digital assets and blockchain technology. They received a grant for building and launching eMin on the Tezos blockchain. This includes the production of an implementation of eMin in Thailand in collaboration with Verifik8 (project 1) and with the United Nations International Organization for Migration (IOM) (project 2). Furthermore, they are producing an enhanced version of the Diginex Trust eMin application for digital auditing purposes in collaboration with the Ethical Toy Program (ETP) and its member companies, including Mattel.



Electis team

Electis is a nonprofit organization based in France aiming to promote new usage of technology for democracy and voting, with particular expertise in blockchain and enabling concrete voting projects. They have continued the development of their Tezos-based e-voting application, which is used by numerous universities to hold elections around the world to contribute to the project. The team is collaborating with Spruce to add Spruce's Tezos-based DID solution to the voting application. Recently, they developed NeuillyVote for the municipality Neuilly-sur-Seine in Paris, France, which held elections through their application.

IBF Net is an Islamic business and finance network that is leveraging research and technology for a halal ecosystem based in Malaysia. As part of their efforts, they are building a charity management platform that integrates Tezos and aims to allow collection, distribution, and management of charity donations in the blockchain, including donations in tez and other cryptocurrencies.

Metaculus is a US-based forecasting technology platform utilized by a community of thousands of active, skilled forecasters to build a better collective understanding of the near- and long-term future of technology, science, and culture, and it provides a global sensemaking utility for hundreds of thousands of readers. Every prediction made on the platform is scored, and optimal aggregates are generated, producing the greatest possible degree of forecast accuracy. A first version of the developments on Tezos is an option to commit predictions to the Tezos blockchain through the use of TzStamp. Future versions work on the resistance to so-called Baltimore Stock-broker attacks in predictions.

MVL Foundation is a company based in Singapore. MVL aims to tackle the shared driving-related market using Tezos as the underlying blockchain. They are working on getting drivers and customers onboarded onto their platform through an application that includes Tezos wallets. Furthermore, MVL will aim to integrate stablecoin options as payment and loyalty point tokens on the Tezos protocol.

Synaps is helping companies follow their Customer Due Diligence (CDD) policies and comply with their Know Your Customers (KYC), Know Your Business (KYB), and Anti-Money Laundering (AML) processes. The particularity of Synaps lies in providing a reusable KYC verification that creates a frictionless onboarding for users through decentralized identity (DID) and self-sovereign identity (SSI) solutions. The self-sovereign identity solution is based on the aleph.im decentralized storage network. This network accepts messages from addresses of supported blockchains, where they are integrating Tezos, in a global database that can be accessed from anywhere.

Talao SAS is a French company implementing a solution in the digital identity space on Tezos. In collaboration with other ecosystem entities that work in the space such as Spruce, they are building a solution that allows companies to issue professional verifiable credentials to talent as employees or freelancers and to companies as customers. It offers talent the possibility to deliver certified data to future employers about their professional skills and experiences in a decentralized manner on Tezos.

Tangany GmbH is one of the major German custody providers for digital assets that has recently become more active in the Tezos ecosystem. As part of their grant, they integrated Tezos into their solution, generating a broad reach into the B2B blockchain ecosystem throughout Europe.

Wolfram Blockchain Labs (WBL) is a US-based team that provides solutions and services powered by the Wolfram Language, Mathematica, Wolfram|Alpha, and assorted Wolfram technologies. In collaboration with teams across the Tezos ecosystem, they aim to create a Wolfram|Alpha integration, oracle integration, and education work completed by WBL on Tezos.

Xcap Ecosystem Ltd is a UK-based company working on Ownera, an end-to-end digital securities platform based on the Tezos blockchain that allows financial institutions to issue and trade digital securities. Their project envisions implementing a digital securities tokenization solution on the Tezos blockchain, which is compatible with the FinP2P specifications and allows organizations to issue digital assets on the Tezos blockchain. Through the use of the FinP2P node, those assets issued on the Tezos blockchain can be published to other FinP2P nodes so that their users can invest in those assets, providing global liquidity for those assets.

Zondax is a team of software developers, engineers, and cryptographers based in Switzerland with diverse technical backgrounds that work together to build innovative tech products for companies from all kinds of industries. The team is currently reworking the Ledger baking application to both improve it and ensure its readiness for future upgrades of the Tezos protocol.

Collectibles and creator tokenization

Tezos allows for the creation of scarce digital goods. As one instance of such goods, NFTs gained tremendous popularity on Tezos. The Foundation issues grants to such projects, which makes Tezos tangible for end users and thereby fosters the adoption of Tezos around the world.

Amplify Creative Group is a US-based fractional ownership platform for the creator economy. The team is working on Tezos in two phases. First, they are developing creator trading card NFTs issued with each AmplifyX investment and, second, a curated NFT platform that allows creators to create their own NFT. By creating this marketplace, creators are aiming to have the ability to monetize their content while engaging their fans and communities of collectors, and buyers are aiming to have certainty around the uniqueness and authenticity of the art purchased.

The team behind **CricTez**, students at Savitribai Phule Pune University in India, are developing a fantasy cricket crypto platform. The platform serves each cricket player participating in the league as multiple NFTs in the form of cards/collectibles. The individual players are defined by a fixed number of cards. Meanwhile, the assumption is 100 cards (NFTs), each having a score of 1.0 at the commencement of the league. Each card/collectible is exclusive to its card score and ownership.

D /a:rt/ is a German project building an auction house and NFT marketplace with integrated stablecoin support on Tezos. The team focuses on bringing art on the blockchain in a user-friendly way and collaborates with the Berlin-based TZ Connect.

The Brazilian firm **hicetnunc2000** pivoted from a focus on eSports to the NFT and collectible space in the past year. Besides their work on smart contracts, they are working on the most popular NFT marketplace and dApp on Tezos, Hic Et Nunc which attracts collectors and artists alike. As part of their developments on the marketplace, they are actively improving the mobile friendliness of the website, optimizing OBJKT swap, and have conducted the “Hicathon,” a hackathon to continue the improvements of the platform.

McLaren Racing are developing on Tezos to create a next-generation NFT platform, putting their fans and consumers at the heart of the experience. Through their Formula 1, Indycar, and eSports programs they have some of the most exclusive and revered assets to mint on Tezos and give the next generation of digital consumers the chance to own a unique piece of the team while participating in a variety of marketing activities. McLaren selected Tezos because of its pioneering proof-of-stake technology and sustainability credentials to develop and embrace innovation as part of the relationship, creating clean and energy-efficient networks for all to use. They are excited to launch their first NFT with Tezos in 2021 and scale the partnership and NFTs into the future as they drive fearlessly forwards both on and off the race track.

Queens Ballpark Company designs, constructs, and operates real estate properties. The company owns Citi Field and is a wholly-owned subsidiary of the New York Mets. As part of the agreement, the Tezos logo is displayed introducing people to “Build, Play and Collect” on Tezos at the Citi Field located in Flushing Meadows–Corona Park in New York City.

Shanghai Kefeng Information Technology Ltd. is a China-based company integrating Tezos into their wallet application and relaunching the **Mozik** music streaming application with additional features that are enabled through Tezos blockchain technology, such as tokenizing music IP and empowering an ecosystem of collectors and fans.

NFT Genius is a storytelling company based in the US that uses collectible NFTs as its main platform. The team has a track record in the blockchain and collectibles space through the “Bitcoin Origins” project and is currently in the process of building a Tezos-centric collection.



Tokencast team

ONEOF is a music-focused non-fungible token (NFT) platform in the US built on Tezos. Its first set of collectible releases is said to include music by the late Whitney Houston, Doja Cat, Quincy Jones, Jacob Collier, and G-Eazy. Fans will be able to use credit or debit cards in over 135 fiat currencies, as well as cryptocurrencies and stablecoins, to purchase NFTs. In addition to a large lineup of artists the platform focuses on providing both artists, and collectors an attractive platform by being not only ecologically friendly but also preventing minting costs for artists and having low barriers of entry for fans.

Open Block Ventures LLC is a US-based firm working to allow NFTs to be displayed in homes, galleries, and offices. **TokenCast** enables this via a set of supported clients including Android tablets, Amazon Fire TV, Android TVs, and Raspberry Pis with the goal to make collections in NFTs more tangible.

Ozone Networks is the US company behind OpenSea, one of the largest marketplaces for nonfungible tokens (NFTs) worldwide. Their team is supported to allow users to explore, buy, and sell Tezos NFTs on the main OpenSea marketplace site and ensure embeddable NFT improvements on Tezos.

Red Bull Racing Honda is a Formula One racing team racing a Honda-powered car under an Austrian license and based in the United Kingdom. In Formula One, innovation is a constant, with cars evolving and developing from race, to race and Tezos is no different. Designed to self-upgrade, Tezos' ability to remain at the cutting edge of blockchain technology makes it a natural fit for Red Bull Racing Honda. Crucially, its energy-efficient design also matches the teams' long-term future environmental ambitions, and as Formula One moves towards carbon neutrality, the low-impact methodology pioneered by Tezos will be a valuable asset. Additionally, working on Tezos helps the team maximize their engagement with fans through the development of NFTs. Red Bull Racing Honda is developing a collectible NFT XR Enhanced ecosystem that brings the brand's innovation and storytelling to the forefront of the fan experience while allowing fans to own a part of Red Bull Racing Honda history.

Papers, the Swiss team behind AirGap, tezblock, Beacon, and other infrastructure applications on Tezos, is actively contributing to the development of common goods in the NFT space. Next to the tzcolors project, the team is supporting other teams and firms in the ecosystem in creating open-source building blocks for their NFT projects.



Vyking team

TezAuction is the project by **Marda web3verse Technologies LLP**, an Indian developer who is focusing on building a marketplace for NFTs using Tezos' FA2 standard. TezAuction is building on SmartPy and is developing a solution powered by a unified flexible framework for conducting different formats of auctions with customizable auctioning attributes running on the Tezos blockchain.

Vyking is a Germany-based firm contributing to the Tezos ecosystem by building a virtual sneaker (and ultimately) fashion NFT marketplace on the Tezos blockchain, underpinned by Vyking's proprietary augmented reality technology. The team has ongoing partnerships with some of the best-known fashion and high fashion firms in the world.

Vertical Crypto Art is a company from the UK focused on the NFT space. The company provides mentorship programs and support on how to navigate the Tezos ecosystem as an artist or creative individual. This includes courses about NFT's, on-/off-chain basics, safety and security for crypto wallets, as well as a dedicated mentorship program specifically on Tezos blockchain with topics including Tezos basic 101, future development of the blockchain, Homebase DAO 101, workshops, and more with the goal to show artists how they can contribute to the Tezos ecosystem.

Crowdfunding

As a further application area, Tezos can be used to support crowdfunding initiatives by providing the necessary platform and tools. The Foundation issues grants to projects introducing new or improving existing processes around crowdfunding great teams and projects within the Tezos ecosystem.

Gitcoin integrated its bounties and hackathons platform with Tezos. Furthermore, Gitcoin will assist in the management, support, and distribution of bounties for development projects including infrastructure, tooling, and applications that support the Tezos ecosystem. The team will also organize and manage online hackathons on its platform in support of Tezos development projects.

Kickflow (formerly known as TezQF) is a quadratic funding (QF) and CLR-matching-based platform for grants and crowdfunding of public goods. Kickflow is attempting to work on funding structures in the Tezos ecosystem by combining general community contributions with sponsorship funds to make the entire process of grants simpler and more efficient (QF and CLR matching). The team is working on creating a decentralized structure for this that is embedded in the Tezos ecosystem.

Smart Crowd is a financially regulated platform in the MENA region offering fractionalized real estate. Their goal is to allow investors to start investing in real estate for as little as USD 1,500. The team aims to improve efficiencies through smart contracts and to increase transparency and accuracy of the transactions and at the same time increase liquidity through the creation of related tokens.



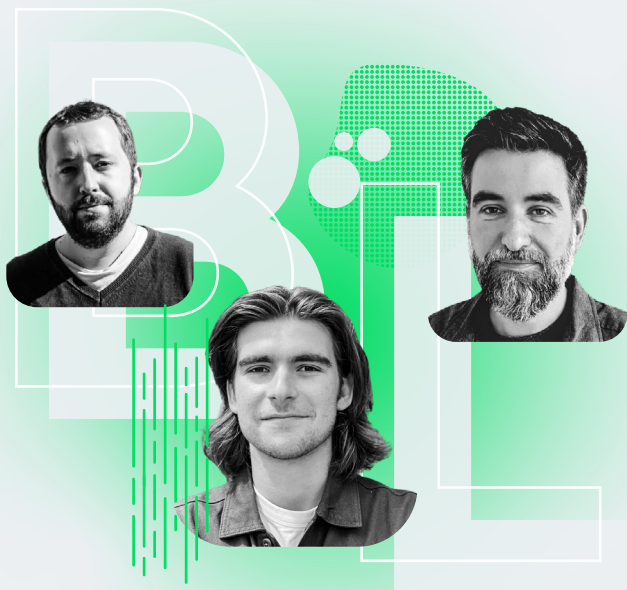
Rethink

DeFi on Tezos is growing exponentially with teams across the world rethinking and innovating financial products and applications.

Tezos
Sustainably
Rethinking Finance.

DeFi

Decentralized Finance (DeFi) is a further application area, which continues to gain popularity, and which refers to the creation of a decentralized financial infrastructure built on blockchains. The Foundation issues grants to projects building the necessary infrastructures, common goods, and tools to strengthen Tezos' role in this application area.



Bender Labs team

Alternative Derivatives Exchange is a UK-based team working on creating the next generation of institutional financial infrastructure. The team built their proprietary internal matching engine and is currently working on bringing the external clearing and settlement on-chain with Tezos as the underlying blockchain technology.

Bender Labs is a France-based team currently building an MVP of the Wrap protocol, allowing anyone to easily wrap ERC20 tokens into tokens on Tezos. Their project includes technical and nontechnical key features such as making use of FA2's whitelisting capabilities and building a wrapping consensus and incentive systems as well as a user-friendly web interface. Furthermore, the team is working on the implementation of cTez and BenderSwap, as SushiSwap like AMM.

The US-based team at **CamlCase**, which was focused on DeFi development and education, received grants to launch and continue both Dexter, a decentralized exchange, and Magma, a mobile wallet. Furthermore, they received funding to build and launch a mobile smart wallet for Tezos with native integration with Dexter. The developed open-source work is continuously used in the ecosystem to build DeFi and similar applications on Tezos.

Ejara is a mobile application that supports cryptocurrencies and tokenized assets uniquely tailored to the African market. With this grant, Cameroon-based **Nzinghaa Lab**, which is the team behind Ejara, will develop and integrate smart contracts into its product to enable secure wallet backup and key recovery, Bitcoin-Tezos atomic swaps, and a cross-chain key registration and recovery system on Tezos.

Madfish Solutions is active in several spaces such as **eth2tez/sol2ligo**. As part of their infrastructure work, they developed the most prominent DEX on Tezos – QuipuSwap – a protocol enabling a seamless exchange of tokens and assets on Tezos in a secure, decentralized, and censorship-resistant manner. Additionally, this Ukraine-based firm is continuing their work on Temple (prev. Thanos), a fully featured wallet focused on UX with integrated support for various Tezos asset standards, dApps, explorers, etc. Furthermore, the team is collaborating with ecosystem members on several projects such as BaseDAO and the Tezos gas station network.

Working title: OpusDei is a project based in Estonia with the goal to create an open-source and decentralized, community-governed financial service for earning interest on deposits and borrowing built on Tezos. The project aims to allow users to suggest, debate, and implement changes. Starting with the Tezos ecosystem, they want to build a product that is user-friendly and open for nontechnical users, opening up the

opportunities of DeFi for a broader audience.

Papers is a Swiss team with several active developments in the Tezos ecosystem. Next to tezblock, AirGap, and further projects, the team builds the open-source building blocks for synthetic assets on Tezos such as the development of required smart contracts. These efforts are built to be embedded in the Tezos ecosystem. They follow the commonly used token standards and are built to interact with popular decentralized exchanges. The integration of lending and borrowing on a primary market platform is the initial use case of these efforts.

Stably is a fintech company based in the US that helps traditional businesses bridge to the cryptocurrency and blockchain space. Stably's mission is to make financial transactions faster, cheaper, and more transparent through a borderless neobanking platform powered by blockchain, stablecoins, and open-finance APIs. Stably is integrating Tezos to enable next-generation DeFi applications and stablecoins in the Tezos blockchain, which they started with a USD-pegged stablecoin.

Smart Contract Labs is an Estonian-based team focusing on blockchain products on modern proof-of-stake platforms. The team has released and is actively working on the SEXP platform, a decentralized synthetic asset exchange that allows users to create and trade synthetic assets on Tezos. Their starting point are binary options on the platform for which they developed required smart contracts.

Wealthchain Inc. is a US-based firm contributing to the Tezos ecosystem through several stablecoins, pegged assets, and other financial instruments on Tezos, and as an active community member taking part in numerous public appearances. The team received a grant for the monthly publishing of audit reports for the "USDtz" stablecoin.

Payment Solutions

For the application area of payment solutions, the Tezos Foundation is issuing grants to projects building payment solutions on Tezos. These services aim to integrate or use tez for payments such as tipping and real-time or "streaming" payments. Further, the integration into payment tooling and applications that allow several parties to create simple contracts for conditional payments in just a few clicks is supported.

CryptoTask is a company based in Croatia that is building the homonymous largest decentralized freelancing marketplace where people can find the best-matching professionals for their needs, and freelancers can seek jobs or microtasks and get paid instantly. The team claims a traction of over 35,000 users on their peer-to-peer freelancing platform. The platform offers automated instant payout settlement, very low fees, no fake or hidden freelancer rate boosts, and a mechanism to store the reputation of participants on Tezos.

Ejara is an organization based in Cameroon that is developing a blockchain-based mobile platform uniquely tailored for African markets to interact with cryptocurrencies and more built on Tezos. It provides access to various affordable offerings ranging from partial shares and commodities to cryptocurrencies and more.

Hexa Solutions is a French company that is developing the Beez platform. This platform is a whitelabel solution for cities and local businesses. It provides a communication tool to reach out to citizens through a mobile application, as well as a dashboard for local businesses and city managers. Hexa is introducing a loyalty and vouchers program on the Tezos blockchain to further enable business owners and city managers to animate local public life.

Mt Pelerin is an authorized financial intermediary based in Switzerland. Their team is building the Bridge Protocol, an open-source asset tokenization platform. Furthermore, they are actively continuing the development of the Bridge Wallet, a noncustodial wallet with crypto fiat on/off ramp and security management token features. Throughout their lineup of key products, they are adapting them to bring them on the Tezos blockchain.

Ohana Labs Pte. Ltd. is an innovation lab based in Canada that is actively working on the Frontier project. They are contributing to the Tezos ecosystem by adding support for tez and Tezos' token standards in their wallet as well as adding staking within the Frontier app. The goal is to allow for existing and future dApps and applications built on Tezos to leverage the integration throughout the Tezos ecosystem.

RADION FM is a US web-based system that operates as a music discovery and streaming platform with a “no custodian” method of payment. RADION seeks to establish and popularize this payment structure in the music industry by embedding public wallets in MP3 files with multimedia metadata while running on the Tezos blockchain. Artists will benefit from this approach by receiving direct payments every time someone downloads their work.

Ramp Swaps Ltd. is a UK-based project focusing on creating a delightful user experience that creates a seamless flow between FIAT and cryptocurrencies. As part of their work, they are actively adding Tezos-based tokens such as tez and stablecoins into their decentralized and robust infrastructure with the goal to make applications built on Tezos powerful with a great user experience.

Shuttle One Pte Ltd. is a Singapore-based company that describes their project as the ShuttleOne.Network, which brings together an ecosystem that allows for on/off ramps for digital assets with a protocol for decentralized asset financing. The team is actively working on supporting Tezos-based transactions, first on test and later on mainnet. Their solutions utilize cryptocurrencies for B2B and e-commerce invoicing/purchase order remittances on the ShuttleOne infrastructure.

Proof of Work blockchains
The average monthly
electric bill of an
American household

The estimated
amount of electricity
required to produce

1 NFT

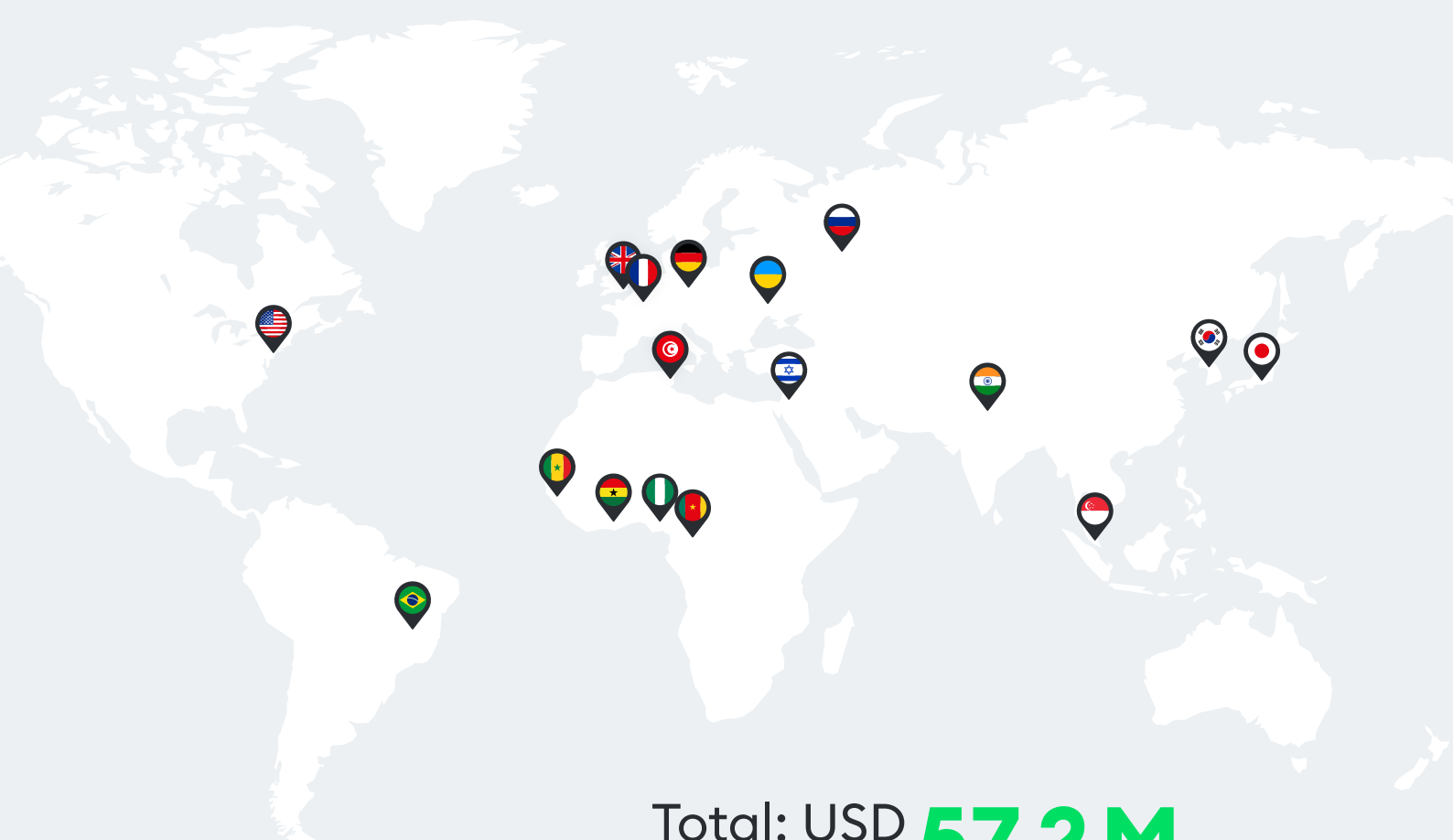


Tezos
Seven Seconds of
an LED light bulb

Tezos
*Sustainable Digital
Expression for Artists.*

Community Grants

Tezos was designed to be a digital commonwealth. The protocol was deliberately written to empower individual members of the community through censorship-resistant transactions, a proof-of-stake-based consensus algorithm, and built-in on-chain governance. These design choices were made to foster a collaborative, open, and global community. To ensure communities around the world have the support they need to succeed, the Tezos Foundation provides funding to entities who support community development, events, and other efforts that grow the Tezos ecosystem. Starting in mid-2021, several entities in the ecosystem have started small grants programs to support their respective regions, which is communicated and managed by them independently. Part of these efforts are Tezos Commons, Tezos Africa, TZ APAC, TZ Connect, as well as Tezos Israel and TZ Gulf.



Total: USD **57.2 M**



BIT.SHES is a US-based platform with the mission to promote inclusion in the blockchain and crypto community through NFT collectibles, resources, and charitable giving opportunities. The team aims to foster and increase the amount of diversity in groups of people involved in early stages of blockchain-related development. BIT.SHES aims to provide opportunities to participate in leveling up the blockchain “playing field” through offering learning and engagement experiences via Tezos-based NFT’s, as well as information, resources, and charitable giving.

Blokhaus is a marketing and communications group specializing in the blockchain space. Unlike other categories, blockchain and cryptocurrency projects move at an extraordinary pace, blending popular culture with technology like never before. Blokhaus provides the services needed for projects and brands in the Tezos ecosystem to resonate with users and stand out from the noise.

Moku.Tech is a team that engages with the Tezos Japan community on online forums and publishes project updates to social media channels contributing to the adoption of Tezos in Japan. As part of their work, they help localize news to the region. They further hold meetups and online sessions to grow the community with ecosystem members.

New Vector, based in the UK, develops the Riot community chat channel, establishing a custom brand for the Tezos Riot channel. It runs an independent Tezos Riot server that is operationally isolated from other users.

Nomadic Labs is, in addition to their development work on Tezos, active as a business development and enterprise support entity on exciting projects in their area. The team helps companies and institutions (e.g. Banque de France, Société Générale, BNP Paribas, EDF, Ubisoft, etc.) to use the Tezos blockchain for their business needs, providing technical support in France, Luxembourg, and Belgium. Their efforts also include contributions to projects such as Lugh, which was launched in 2021.

The **Norn Community’s** TezosNotifierBot is a popular Telegram bot used to monitor various events on the Tezos blockchain such as transactions, delegations, missing block endorsements, double baking, etc. The Norn Community constantly improves and adds features to its @TezosNotifierBot for Telegram, also increasing the amount of channels offered.

The **Proof of Stake Alliance** is a US-based organization bringing together thought leaders in the space. They are actively working with ecosystem teams to understand needs and act as a unified voice supporting and growing proof-of-stake-related technologies, with Tezos being one of the first running blockchains based on proof-of-stake.

Tezos Brazil is a team that engages in business, product, and community development. Through these initiatives, Tezos Brazil promotes the adoption and growth of the Tezos project and ecosystem in the continental-sized country.

Tezos Cameroon, Tezos Ghana, Tezos Nigeria, Tezos Senegal, and Tezos Tunisia are five main chapters that are actively growing the adoption of Tezos throughout the region in Africa. Each team focuses on their respective markets with a close alliance between the teams to grow Tezos' presence together. Initially, they are focusing on community building, social media presence, and building baking activities in their region. Another key focus is the support and education of local developers to start building on Tezos in order for business and opportunities to grow in the region. The teams closely collaborate with Tezos West Africa, which fosters the local teams through its experience in building products on Tezos in the region.

Tezos Commons is a US-based nonprofit foundation. Their team is contributing to the Tezos project across a number of projects, including supporting its operations and initiatives on education programs, education media, and the Tezos LaunchPad. They collaborate with various Tezos entities and support different projects such as Kukai, Tezos Help, and Tezos Agora. With their growing team, Tezos Commons is contributing to community projects such as hackathons and are actively enhancing engagement across media.

Tezos Gulf Technologies is focusing on the United Arab Emirates and the Middle East. With the grant, it set up an entity and supports the growth of the ecosystem in the region through partnerships with tech hubs across the Middle East and active engagement with private and public institutions.

Tezos India serves the largest democracy in the world by supporting individuals and entities who are eager to use Tezos in India. The team helps and trains individuals and organizations to work with Tezos and organizes and supports community activities in its region. Further, they support the organization of hackathons and webinars to grow the Tezos community throughout the country.

Tezos Israel is an innovation lab that serves the Israeli community in educating and training developers while building advanced blockchain technologies for the Tezos ecosystem. Their mission is to build awareness and integrate Tezos blockchain technologies amongst the Israeli high tech ecosystem and government offices.

Tezos Ukraine is a nonprofit organization run by Ukrainian blockchain enthusiasts and industry experts. The team facilitates and expedites the growth and enhancement of the Tezos network in Ukraine and Eastern Europe. Their efforts include supporting the development and implementation of training courses for Tezos technology developers, organizing hackathons, and meetups. Tezos Ukraine is also putting in place a communication strategy aimed at building a sustainable Tezos community in Ukraine.

Tezos (West) Africa supports the growth of a vibrant Tezos community in western Africa and raises awareness about the Tezos blockchain through meetups and local tech conferences. Building on their structured introductory Tezos training for local developers, the Cameroon-based team leads the strategy on the African continent by helping other teams to train local developers and help businesses build on Tezos.

Tezos Korea is a nonprofit organization that collaborates with Korean universities and hosts events, provides education, and supports technical development. Tezos Korea handles business consulting and facilitates the adoption of Tezos in Korea.



TZ Connect team

TQ Tezos is a New York City-based organization that focuses on driving adoption, marketing efforts, and awareness of Tezos. In addition to building Tezos-based solutions and open-source software for enterprises and developers, it engaged in business development, helped start-ups and enterprises adopt Tezos for a variety of exciting use cases. TQ Tezos works closely with community members on events and ecosystem development initiatives in collaboration with organizations in the ecosystem such as Truesy, Interpop, Blockhaus, and more.

TZ APAC Pte. Ltd. (“TZ APAC”) is a leading Asia-based public blockchain consultancy supporting the Tezos ecosystem. Headquartered in Singapore, TZ APAC designs value-added blockchain transformation strategies for enterprises and creators with a bottom-up approach, working closely with blockchain experts and other stakeholders in the Tezos ecosystem.

TZ Connect is a Berlin-based team dedicated to advancing the Tezos ecosystem by building open-source software, providing support to projects and companies building on Tezos, and connecting to the worldwide Tezos community. TZ Connect values inclusion, accessibility, and equal opportunity. Anyone with ideas, skills, and a drive to get things done should be able to do so without unnecessary bureaucratic hindrances.

XTZ News is a key team based in the US and working on delivering updates and news about Tezos to the world. The team is actively collaborating with ecosystem entities. In addition to their news activity, they are constantly improving their website to deliver the most relevant information to the entire Tezos community in a clear and concise manner.

Industry Adoption



Industry Adoption – Collaborations

To foster the growth and adoption of the Tezos protocol, the Tezos Foundation collaborates with companies and institutions to support the creation of products for real-world implementation. In these kinds of collaborations, the focus typically lies in building an understanding of the technology, identifying relevant technology applications, and funding projects where necessary.

Digital Securities

Alliance is the leading property developer in Manchester, UK, and aims to tokenize UK real estate on the Tezos blockchain together with partners such as tZero and digital securities advisory boutique Megalodon. Its first digital security project, the River Plaza in central Manchester, is currently being developed.

Andra Capital's open-ended fund breaks the mold of traditional venture capital investing and digital securities by leveraging blockchain technology. The fund invests in leading late-stage, private technology companies that are backed by top-tier VCs valued at USD 500 M or higher and that are leaders in their industries.

Reit BZ, a Brazil-based project backed by Latin America's largest investment bank, **BTG Pactual**, offers foreign investors access to Brazil's growing real estate market through a security token called Reit BZ (RBZ). RBZ tokens are backed by distressed real estate assets mainly in the states of São Paulo and Rio de Janeiro. Similar to dividends for stockholders, RBZ token holders will receive periodic dividends from the recovery of said distressed assets. Tezos is used as the default blockchain offered for RBZ's security token.

Draper Goren Holm (DGH) is a Los Angeles-based venture studio and fund, set up as a partnership between Tim Draper, Alon Goren, and Josef Holm. In April 2021, DGH announced plans to incubate and accelerate start-ups built on the Tezos blockchain. This follows the long-term support of the ecosystem since the early days of the Tezos ecosystem.

German-based **Fundament** which launched the first digital security in Germany regulated by the financial market authority, BaFin, has undergone a restructuring including a rebranding to **Own Capital**. The Foundation terminated its financial contracts and does not hold a relationship with Own Capital.

Globacap is a London-based primary issuance and administration platform for digital securities, regulated by the UK's Financial Conduct Authority (FCA). Globacap is a partner of many digital securities exchanges, offering cap-table management and a secondary market for blockchain-based digital securities. Tezos is offered as the preferred underlying blockchain for all issuances via Globacap.

Logical Pictures is a French company with expertise in content financing, film production, and talent upbringing. In collaboration with BNP Paribas, they launched 21 Content Ventures, an investment fund dedicated to films and series, offering the opportunity to take advantage of the growth in the audiovisual content market. The fundraising will take the form of an STO on the public blockchain Tezos, a European premiere in the entertainment industry.

Taurus Group is a Swiss FINMA-licensed securities firm that offers custody, trading, and market making for digital assets to businesses such as banks in Europe. Taurus promotes Tezos as its blockchain technology partner and integrated Tezos as blockchain for digital securities issuance on its platform.

Vertalo is a cap table, compliance, and investor onboarding platform utilizing blockchain technology to connect and enable the digital asset economy. As an SEC-registered transfer agent, Vertalo supports the ongoing asset management needs of private companies, broker dealers, and investors, and will use Tezos as the default blockchain for its clients.

Payment

Baanx has developed a proprietary platform for mobile banking applications, including a wallet and payment rails, and operates as a distributor for third parties. Baanx holds an e-money license in the UK. The core product is white-labeling the Baanx decentralized cryptocurrency bank, exchange, and payment system. Baanx products also include a cryptocurrency mobile payment app with a physical and virtual VISA debit card option already issued in 30 countries. Tezos will be integrated as a payment currency.

Digital Asset Platforms

Bitcoin Suisse has developed custody solutions for XTZ, including options for staking and delegating into their main offerings. It further helps mint tzBTC tokens based on the FA1.2 token standard and control the storage of the Bitcoin, which is committed when new tokens are issued through its subsidiary Swiss Crypto Tokens. Furthermore, the Tezos Foundation has participated in its Series A financing completed at the end of July 2020.

The **Elevated Returns Exchange** (ERX) is built on Alpha Point, with Tezos as the underlying blockchain. It is approved by the Thailand Securities and Exchange Commission (SEC) and lets investors buy and sell investment tokens.

Equisafe uses Tezos to offer security, traceability, and real-time updates to manage registries of votes and shareholders for unlisted companies. It provides a platform for the tokenization of financial assets and the creation and maintenance of digital assets in a shared electronic recording solution based on Tezos as well as supporting the ecosystem through a baker.

Securitize is a platform to deliver trusted global solutions for creating compliant digital securities, including funds, equity, fixed income, and real estate. Securitize has integrated Tezos into its offering, which will be available to issuers from around the world.

StakerDao is a platform for issuing and wrapping digital tokens on blockchains in a decentralized format. In addition, the platform facilitates liquidity pools and reward farming for digital tokens on multiple blockchains and venues including the Tezos blockchain and QuipuSwap. In mid-2020, the STKR token, the governance token for the StakerDao platform was launched on the Tezos blockchain.

Memberships, Associations, and Corporate Infrastructure

The **Capital Markets and Technology Association (CMTA)** is an independent association formed by leading actors from Switzerland's financial, technological, and legal sectors to create common standards around issuing, distributing, and trading securities in the form of tokens using the distributed ledger technology (DLT). The aim is to facilitate the use of DLT in the field of capital markets.

The Foundation supports **corporate bakers** through tez loans in order to facilitate corporate adoption on Tezos. Those sandbox-type loans enable corporations to get in touch with Tezos and educate its developers.

DLT Education Consortium is a global passport for distributed ledger technology and digital assets, which is a benchmark industry standard for anyone working in the blockchain industry. DEC was created by a consortium of leading universities and institutions researching and teaching DLT.

The **OpenVASP Association** is a nonprofit organization dedicated to advancing the protocol and its ecosystem based on the needs and requirements of its members. Its objective is to establish and maintain an open protocol for the transmission of transaction information between virtual asset service providers (VASPs) and other parties.

The **Bitcoin Association Switzerland** is an active community of enthusiasts with regular events trying to resolve open legal questions and educate the public by providing a contact point for media inquiries.

Multichain Asset Managers Association (MAMA) is a global community of organizations working to transform asset management through blockchain technology and holds events all year round, including Paris Blockchain Week Summit and the Singapore FinTech Festival.

The objective of the **Swiss Blockchain Federation** is to promote the attractiveness of Switzerland as a location for blockchain-based activities and encourage the development of a secure and competitive legal framework. The Swiss Blockchain Federation is a public-private partnership, combining agents from the blockchain sector, the fields of politics and economics, the scientific community, and the public sphere.

Maps of the Tezos Ecosystem

Asia



Grants

Active grants during the period



Public bakers

As of July 31, 2021, Blockwatch Data

Europe



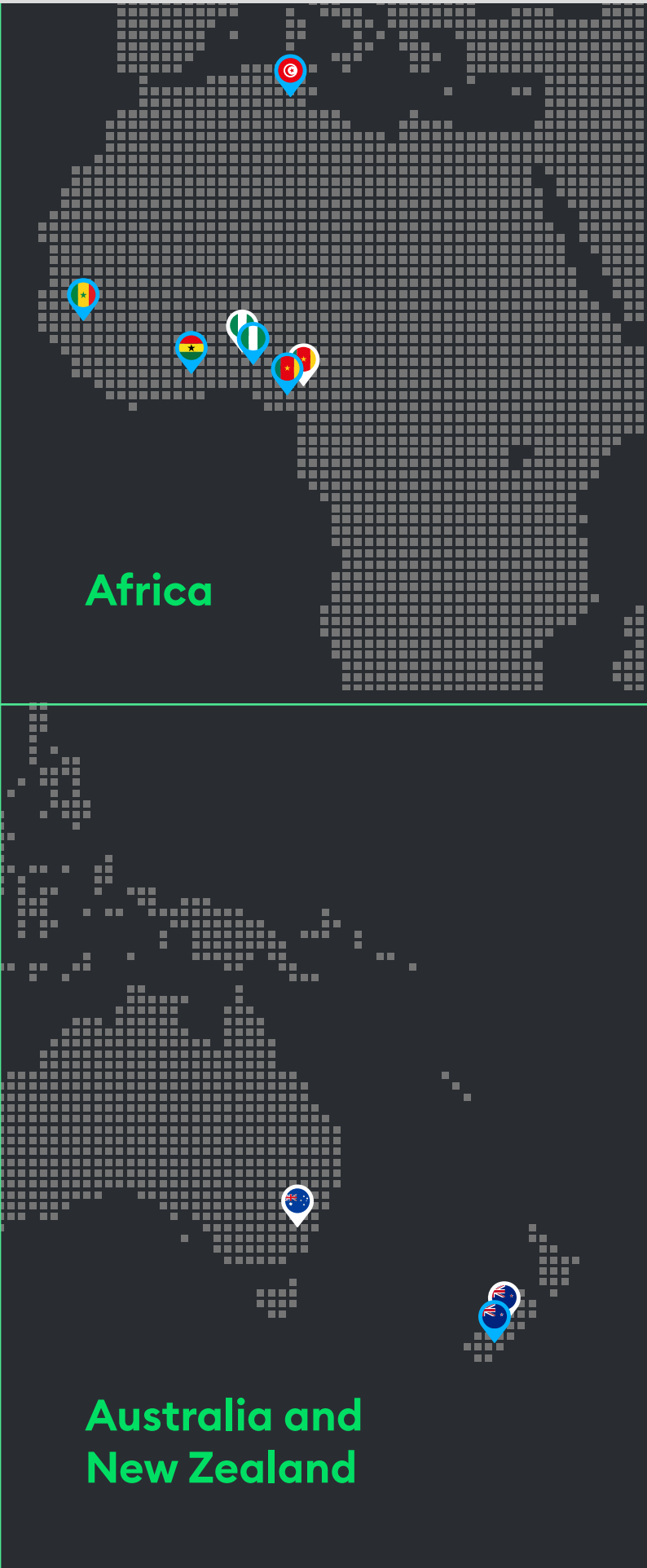
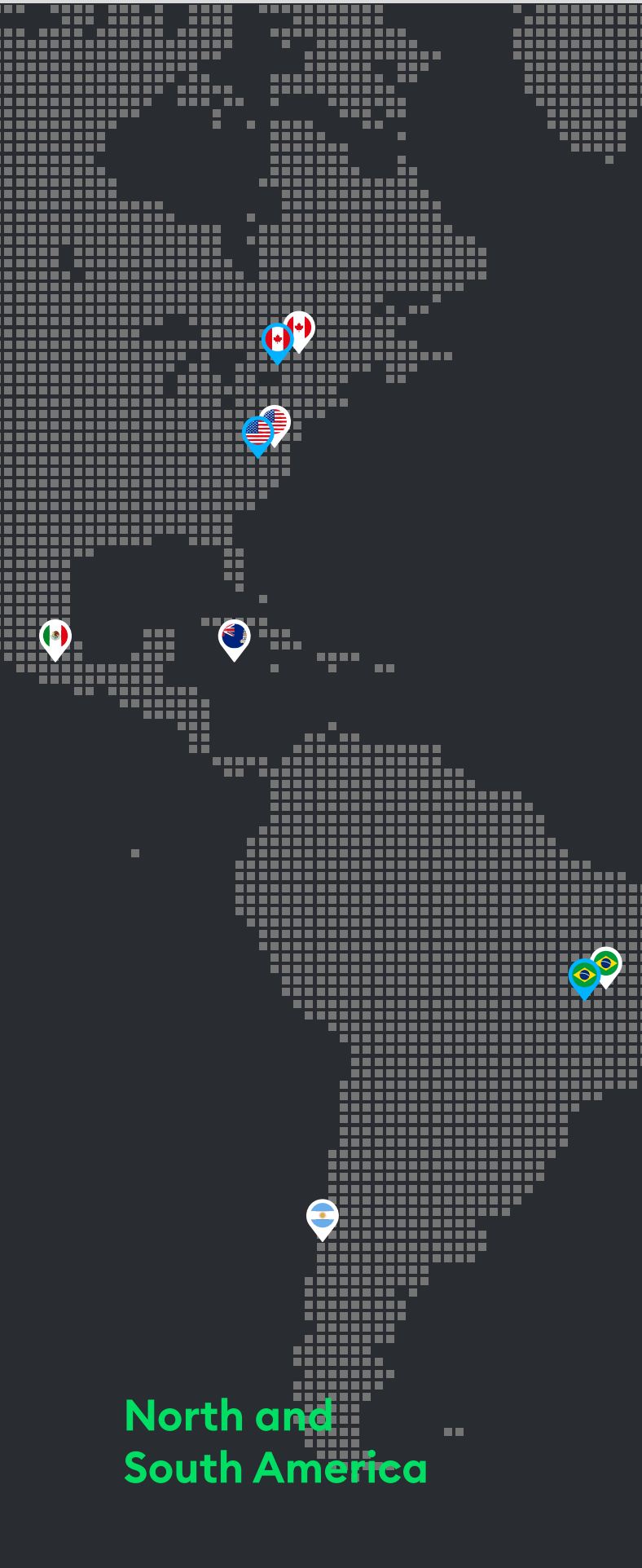
Grants

Active grants during the period



Public bakers

As of July 31, 2021, Blockwatch Data



Financials



Financials

The past six months have been tremendously successful for the Foundation considering the new projects, use cases, and adoption plans on Tezos. This can also be seen in the amount committed for grants and software agreements in the past six months, which nearly quadrupled compared to the last period.

In the past period, the finance function of the Foundation has executed more than 500 payments to grantees in all major fiat currencies, including transactions in cryptocurrencies. As a consequence, the number of accounting journals that reflect the business activities is significantly growing, which is why the Foundation heavily invested in the automation of different processes. Most notably, the process that has been automated is the bookkeeping of crypto transactions by taking actual transactions directly from the blockchain and compiling them into a readable file for our accounting tool.

In June 2021, the fourth statutory audit by PricewaterhouseCoopers for the financial year 2020 was completed. This time, its scope covers statutory financial statements under local accounting frameworks and consolidated financial statements in accordance with international financial reporting standards (IFRS for SMEs) for the Tezos Foundation Group, including the Foundation's indirect subsidiaries in France, Germany, Singapore, and Dubai.

The crypto market around the world has been very volatile in recent months. The Foundation is very happy that despite this the total assets remained stable compared to six months ago. Especially notable was that the stability fund served its exact purpose during this time, as it never reacted to the volatile markets around the globe. This was the reason why we increased the value again by USD 14M.

Key Figures

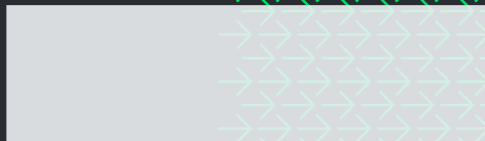
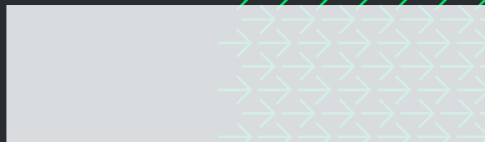
Assets held as of July 30, 2021 had a market value of USD 1'212 M compared to USD 1'176 M on January 31, 2021. The Foundation's cryptocurrency assets are predominantly Bitcoin (BTC) and Tezos (XTZ), and both continue to be stored in several secure custody solutions. In 2021, the Tezos Foundation continued to strengthen the allocation of XTZ to certain long-standing, successful grantees to reward them for their participation and ensure their long-term commitment to the Tezos ecosystem.

To adequately manage its own liquidity requirements, the Foundation holds a conservative and diversified portfolio with liquid assets such as bonds, ETFs, and commodities at Swiss banks. Further, fiat is held with several banks in multiple jurisdictions: 66% in US dollars, 14% in euros, 11% in pounds sterling, 7% in Swiss francs, and 2% in Singapore dollars. Other assets are predominantly strategic equity or debt investments, or cryptocurrencies such as Ethereum.

in USD M	July 30, 2021	in %	January 31, 2021	in %
Cash (fiat)	61	5%	47	4%
Bitcoin (BTC)	601	50%	600	51%
Tezos (XTZ)	243	20%	258	22%
Stability fund	226	19%	212	18%
Other investments	81	6%	59	5%
Market value of assets	1,212		1,176	

Switching one incandescent lamp to LEDs compensates the amount of CO₂ per year that is used by 1,000 transactions on Tezos.

numbers are based on estimations for bakers and transactions in 2020



Tezos
Sustainable
Payments.

Governance



Council & Committees of the Tezos Foundation

In order to provide the Tezos community with more transparency about the Tezos Foundation's organization and governance, outlined below are the functions and responsibilities of the Tezos Foundation's bodies.

Foundation Council

The Foundation Council has overall responsibility for managing and administering the Foundation and its assets, and for defining the Foundation's strategy. In line with its charter, the Foundation Council has delegated the operational and asset management duties to the Executive Committee of the Foundation. The Foundation Council appoints and constitutes itself. It is currently composed of nine members, including the Chair of the Foundation Council.

Audit Committee

The Audit Committee monitors the Foundation's financial and business reporting, including financial statements and tax matters. The audit process includes reviewing the activities, adequacy, and effectiveness of the Foundation's statutory auditor (PwC Switzerland).

Executive Committee

The Executive Committee is entrusted by the Foundation Council with the operational and asset management duties of the Foundation. In addition, the Executive Committee implements the Foundation Council's resolutions and is, among other things, to some extent responsible for investment decisions fostering the Foundation's purpose.

Investment Committee

The Investment Committee (IC) provides recommendations and advice to the Foundation Council and the Executive Committee about all investments of the Foundation outside of regular grants and ordinary asset management.

Technical Advisory Committee

The Technical Advisory Committee (TAC) was established to provide recommendations and advice to the Foundation Council and the Executive Committee on all technical matters of the Tezos protocol. The TAC includes external members from throughout the Tezos community.

Nomination and Remuneration Committee

The Foundation Council recently appointed a Nomination and Remuneration Committee to evaluate and propose new members to the Foundation Council. The committee is further responsible for regularly assessing the Foundation's remuneration model.

Foundation Council

The Tezos Foundation Council is composed of accomplished professionals who lead the Tezos Foundation as it supports the Tezos protocol and ecosystem. Individually, they bring expertise and insights from their respective fields. Collectively, they form a council full of unique backgrounds and experiences from all over the world.



Hubertus Thonhauser
Chair

Hubertus is a founding partner of Enabling Future, a family-of-fice-backed VC firm and tech company builder based in Dubai. Previously, he cofounded Babil Games, the MENA region's leading mobile games publisher, acquired by Stillfront Group in 2016. Prior to 2010, Hubertus held various C-level and board roles within the Casinos Austria Group, a European market leader in the regulated digital gaming and casino industry.



Alexis Bonte
Member of the Foundation Council

Alexis is the cofounder and CEO of the online gaming company eRepublik Labs, which is part of the Stillfront Group, where Alexis holds the position of the Group COO. He is also a former venture partner of Atomico and an angel investor and board member in several Internet and game companies. Originally from France and Portugal, Alexis holds a BA in International Business and Languages from the European Business School, London.



Arthur Breitman
Member of the Foundation Council

Arthur Breitman is an early architect of Tezos. Previously, Arthur was a research engineer for Google X and Waymo. In his early career, he worked as a quantitative analyst for Goldman Sachs and Morgan Stanley. Arthur graduated from the École Polytechnique and the Courant Institute of NYU, where he studied Applied Mathematics.



Alice Lloyd George
Member of the Foundation Council

Alice is the founding partner of early-stage venture fund Rogue Capital. Since 2013, Alice has been investing in emerging technology and Internet culture in areas including gaming, blockchain, machine intelligence and computer vision, robotics, virtual and augmented reality, and NewSpace. Previously, Alice was a board member and observer for 12 portfolio companies at RRE Ventures, an investor at Bridgewater Associates, a fellow at the Brookings Institution in Beijing and Washington, DC, and a reporter with The Wall Street Journal in Hong Kong.



Lars Haussmann
Chair of the Audit Committee

Lars is the Head of Corporate Management and Company Administration at Haussmann Treuhand AG. He has served at Haussmann Treuhand AG since 1999 and has extensive experience in corporate management, administration, and accounting matters in demanding and complex situations. Lars is originally from Switzerland and holds a degree in Economics from the University of Zurich. He is a Swiss certified chartered accountant.



Olivier Jaillon
Member of the Foundation Council

Olivier is the Chief Executive and Enablement Officer of Wakam, formerly known as La Parisienne Assurances, a leading French insurance company that delivers customized white-label insurance products to brokers, insurtech companies and non-insurance distributors across Europe with a GWP of EUR 382 million. Olivier graduated from emlyon business school and has a master's degree from SDA Bocconi in International Economics and Management. He is the author of *The Intangible Age*, a book explaining how our societies are transitioning from an ownership to a sharing economy.



Anil Madhavapeddy
Member of the Foundation Council

Anil is a University Lecturer (Associate Professor) in the Computer Laboratory at the University of Cambridge, where he researches the intersection of computer systems and programming languages. Anil has worked extensively on open-source software for over 25 years, and his research has been spun out into numerous commercial entities. He was part of the team that created the Xen hypervisor (acquired by Citrix in 2007) and he founded Unikernel Systems (acquired by Docker in 2016). He has additionally directed the OCaml Labs Group since 2012.



Daniel Masters
Member of the Foundation Council

Daniel is a cofounder and the chairman of the CoinShares Group, a leading digital asset investment firm that manages hundreds of millions in assets on behalf of a global investor base. He also launched the world's first regulated Bitcoin fund and founded Global Advisors, an oil- and commodities-focused investment house. With over 30 years of experience in pioneering new asset classes, he is a well-known and respected voice in the digital asset ecosystem. Earlier in his career, Daniel was the Global Head of Energy and Trading at JP Morgan. Originally from the UK, he holds degrees in Physics and Statistics, and is proud to have traded more oil contracts than any other living person.



Chris Wright
Member of the Foundation Council

Chris is Senior Vice President and Chief Technology Officer (CTO) at Red Hat, an open-source software company that was acquired by IBM in 2019. As CTO, Chris has helped Red Hat transition from a single-product business to the foundation from which global enterprise clients can scale apps and roll out emerging technologies across all types of cloud environments. Chris is passionate about open-source software and has spent 25 years in the industry and 20 years in open source.

Foundation Committees

Executive Committee

Hubertus Thonhauser
*Chair of the Foundation Council
(Executive Committee member ad interim)*

Roman Schnider
Chief Financial Officer / Head of Operations

Investment Committee

Hubertus Thonhauser
Chair, Chair of the Foundation Council

Alice Lloyd George
Member of the Foundation Council

Roman Schnider
Tezos Foundation

Audit Committee

Lars Haussmann
Chair, Member of the Foundation Council

Hubertus Thonhauser
Chair of the Foundation Council

Daniel Masters
Member of the Foundation Council

Nicolas Hofstetter
Tezos Foundation

Roman Schnider
Tezos Foundation

Technical Advisory Committee

Michel Mauny
Chair, President of Nomadic Labs

Bruno Bernardo
Nomadic Labs

Benjamin Canou
Nomadic Labs

Jun Furuse
DaiLambda

Luis Gonzalez
Tezos Commons

Anil Madhavapeddy
Member of the Foundation Council

Wayne Chang
Spruce Systems

Scott Littlewood
TZ APAC

John Newby
TZ Connect

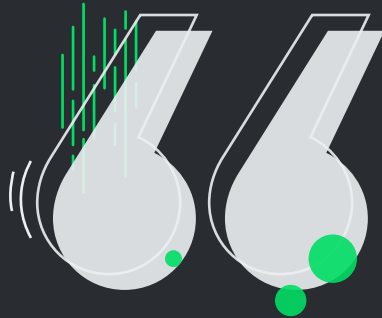
Waleed Rassuli
Tezos Gulf

Nomination and Remuneration Committee

Hubertus Thonhauser
Chair, Chair of the Foundation Council

Alexis Bonte
Member of the Foundation Council

Lars Haussmann
Member of the Foundation Council



*We seek to empower persons
and entities from all over
the world to create a robust
and decentralized digital
commonwealth.*

Tezos Foundation

Get involved with the Tezos project at tezos.com
Learn more about the Tezos Foundation at tezos.foundation

The Tezos Foundation is a nonprofit Swiss foundation with domicile at Dammstrasse 16 in 6300 Zug, Switzerland. The Tezos Foundation is supervised by the Swiss Federal Foundation Supervisory Authority (SFSA), which is part of the Swiss Federal Department of Home Affairs. The Tezos Foundation's purpose is the promotion and development of new technologies and applications, especially in the fields of new open and decentralized software architectures, including the promotion and development of the Tezos protocol and related technologies. This Biannual Update is not the Tezos Foundation's official activity update due to the SFSA. All the information in this Biannual Update is published in good faith and for general information purposes only. The Tezos Foundation does not make any warranties about the completeness, reliability, or of the information contained herein. Unless otherwise stated, all data, information, and pictures contained in this Biannual Update are produced by and belong to the Tezos Foundation as its intellectual property.