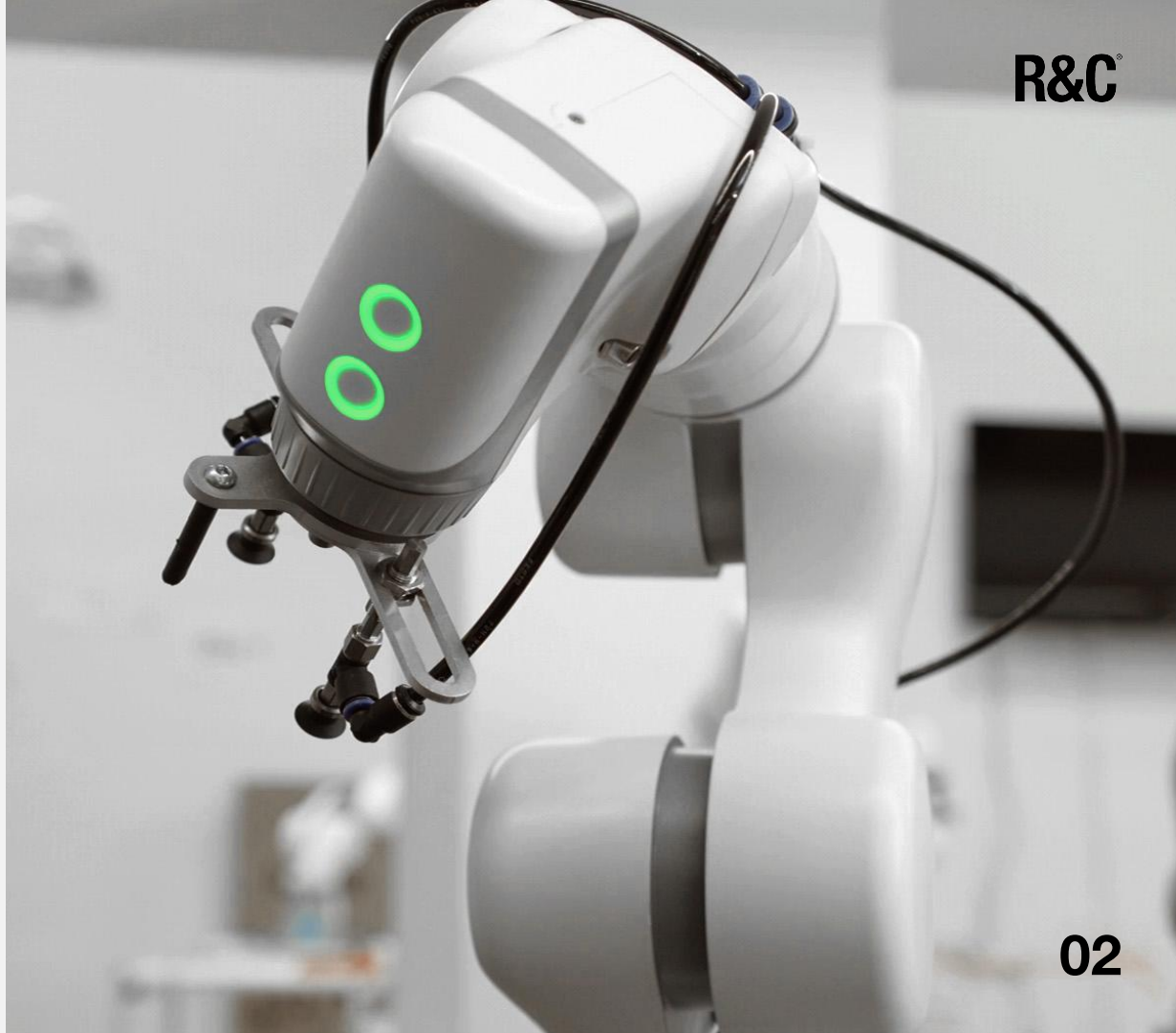# R&C®

onboarding industries to web3

purpose

Onboarding Industries to Web3

vision

A world of interconnecting token economies, enabling sustainable, green, resilient industries

mission

Building, deploying, and maintaining decentralized, token economic systems

growth to date

Why Riddle&Code is the right trusted partner for Web3 solutions

founded

2016

funding state

series A

industries

mobility, energy and material

partners

Wien Energie, CEVT, Deutsche
Telekom, Daimler, IPDB, Evoniks,
Adapa, BMW, and more

success/minimum viable products

hardware wallets for machines,
tokenizing physical assets,
meta-data blockchain confidential and
trusted computing system

key domain knowledge

distributed ledger technology;
blockchain; cryptography; open
hardware development, enclave
technologies
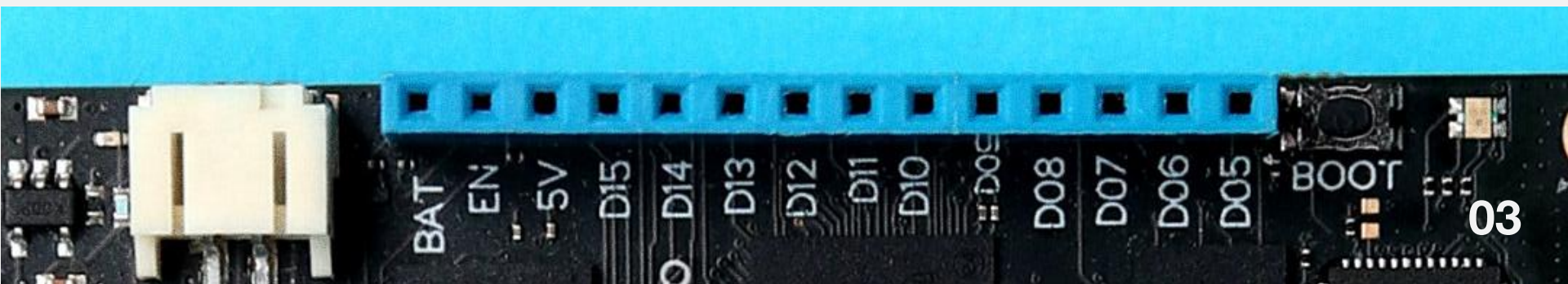
why web3

The world is relentlessly transforming into the third phase of the Internet - Web3.

Business models and system architecture are evolving and there is a need for trusted, decentralized, transparent infrastructure to support this evolution.

products and services

R&C provides software solutions that enable effortless integration between Web3 and the physical world, by seamlessly connecting software with compatible hardware.

| applications | developer tools | web3 hardware |

mypwr

A suite of apps designed to enable users to fully leverage the benefits of R&C's decentralized architecture, including tokenized energy for microfinancing, real-time energy certificates, and peer-to-peer trading

web3 builder space

W3BS provides the ideal set of tools for all kinds of software components needed for bespoke industry solutions. R&C offers a wide range of APIs, SDKs, and services to choose from.

+

physical trust anchor

R&C builds solutions with the RDDL Network´s Trust Anchor, which ensures a trusted connection of almost any kind of machine and therefore various industry use cases.

07
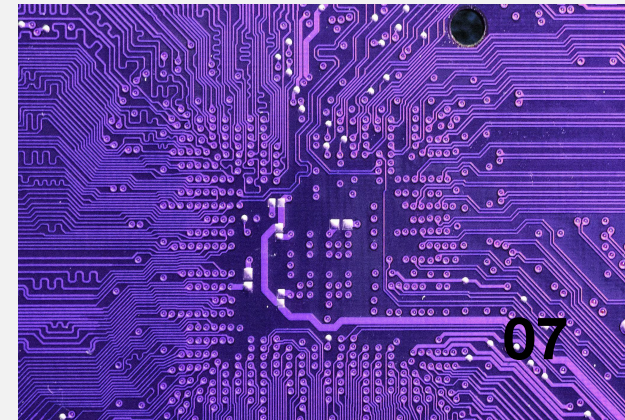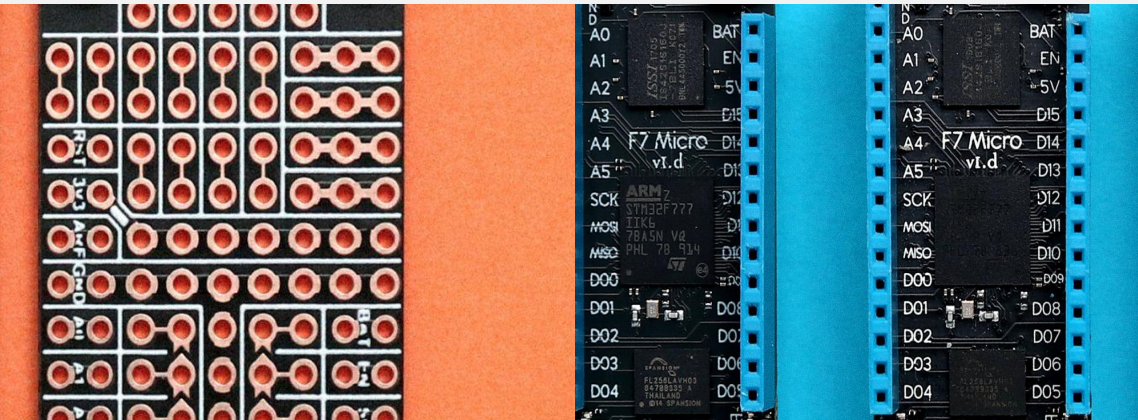
mypwr

An app suite that maximizes benefits from decentralized architecture for tokenized machine data for microfinancing, real-time supply chain certificates, and P2P trading.

beyond "smart"

Current "smart devices" only provide monitoring and control features, lacking the ability to transact, leaving massive value potential untapped.

machine2machine transactions

MYPWR extends smart devices with a wallet component, tokenizing the asset and data output, enabling safe, efficient, and highly automated transactions with other machines in the network

bootstrapping digital ecosystems

MYPWR'S ecosystem creates a new market segment for digital service providers, providing the right tool for any decentralized energy scenario with a SaaS business model.

web3 builder space

A stack of domain specialized software products, flexible components, and services with no-code & low-code approaches.

R&C

`software development tools`

Start developing with RDDL API, SDK, services and components

`application templates`

Explore our industrial-grade application templates to kickstart your own business idea

`control panel`

From multiple hardware wallet orchestration to data analytics and connectivity with other web3 layer such as Ocean, Streamr and more

`faster, cost-efficient, safe`

Develop your own application with building blocks and transform data into value
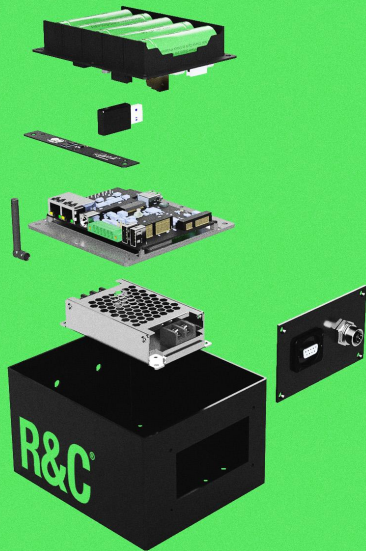
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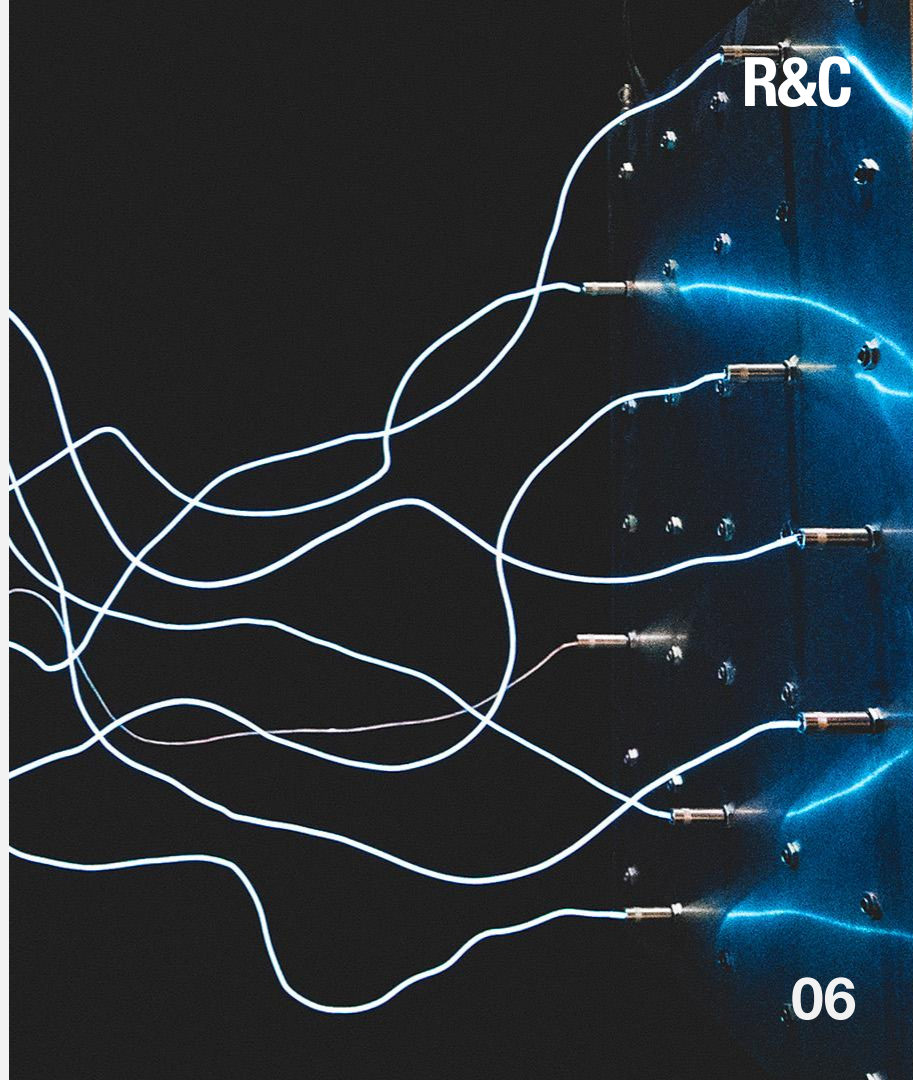
trust anchor - hardware cryptographic wallets

R&C provides knowledge to implement hardware wallets that meet diverse industry requirements
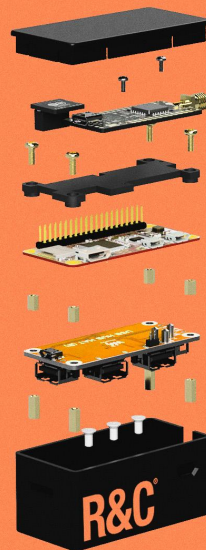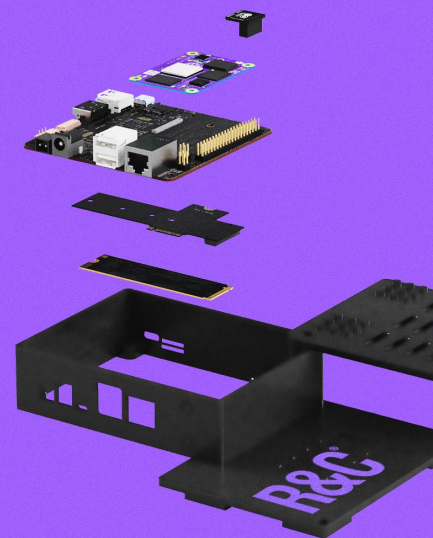

trust anchor

industry wallet

energy wallet

community wallet

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team

Extensive experience in designing and building Web3 technology

R&C

Thomas Fürstner
Founder & CTO

Alvaro Mier
CFO

Jürgen Eckel
Protocol Architect

Gianluca Graf
Head of Sales

Christiane Rinke
Head of Marketing

John Calian
CEO

Kai Siefert
CPO

Christian Dienbauer
Head of Engineering

Dietmar Kofler
Head of Product &
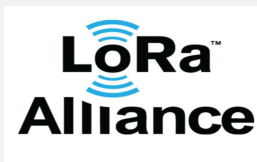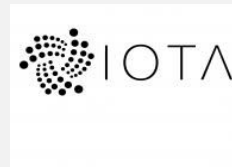Community

Julian Strobel
Head of DevOps &
Cryptography

partner and clients

R&C is trusted by key industry players

R&C

sustainability

R&C is committed to the UN Sustainability Goals, implementing sustainable practices to reduce costs, increase efficiency and create a more sustainable future.

R&C®

goal 07

Ensure access to affordable, reliable, sustainable and modern energy for all

goal 09

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

goal 11

Make cities and human settlements inclusive, safe, resilient and sustainable

goal 13

Regulating and reducing emissions and promoting renewable energy

7 AFFORDABLE AND CLEAN ENERGY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

THE GLOBAL GOALS

MYPWR
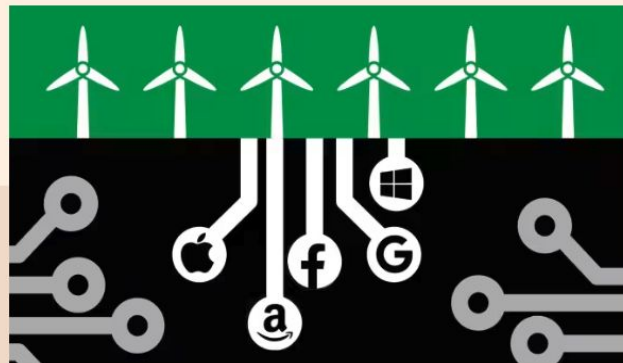
EXISTING APPLICATIONS

R&C

08

existing energy certificates not up to the task

1. **Lack of precision** - When? Where? Who?

2. **Complicated data access** and inefficient reporting

3. **No validity beyond the meter**

Energy consumers with decarbonization pressure have become the rule rather than the exception - they want to know more about the product they are buying!

**How tech went big on green energy**

To meet ambitious climate pledges, Amazon, Apple, Facebook, Google and Microsoft have become the dominant buyers of clean power

FINANCIAL TIMES

mypwr - next generation energy certificates

- Hardware secured **proof-of-origin**
- **Proof-of-proximity** of production and consumption (time & location)
- Near **real time traceability**
- **Cross-sector compatibility** (green mobility, materials, heat, etc.)
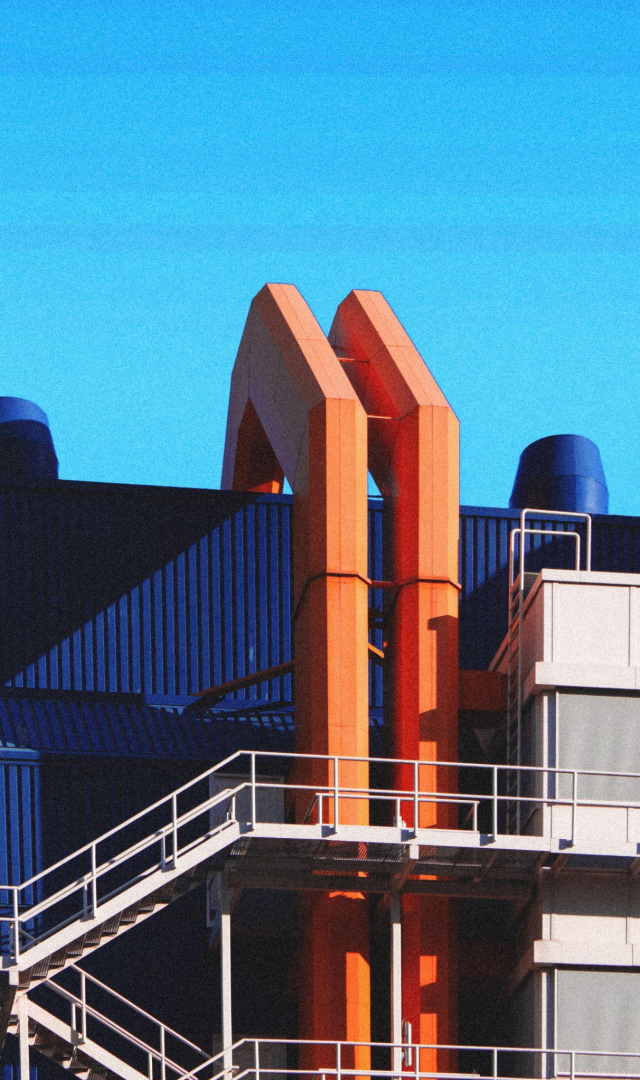
MYPWR _ product suite

turns machine data into actionable digital assets, empowering users to drive innovation and growth.

```
mypwr_community

Decentralized, digital services for prosumers and energy
communities (e.g. load balancing, peer-to-peer trading,
energy as a currency, etc.) powered by real-time data.
```

```
mypwr_invest

Promoting new financing models for green energy projects by
enabling micro investments into machine NFTs.
```

```
mypwr_track&trace

Track the digital twin of each kWh product from source to
consumption and trace its carbon footprint.
```

MYPWR _community

energy independence starts with data independence

problem

Poor data accessibility through existing energy meters massively impedes value creation capabilities of energy communities.

- Low availability of intraday data
- Data gaps are a common problem
- Lack of data control features reduces willingness to share data

solution

The innovative smart-meter extension with real-time data access and simple "Plug and Play" implementation, coupled with full end customer data control, forms the basis of provide decentralized , digital services to prosumers and energy community (e.g. load balancing, peer-to-peer trading, energy as a currency, etc.)

features

#P2PEnergySharing #SmartContracts #RecommendationEngine #RealTimeData #RemoteDeviceManagement #EnhancedDataAnalytics
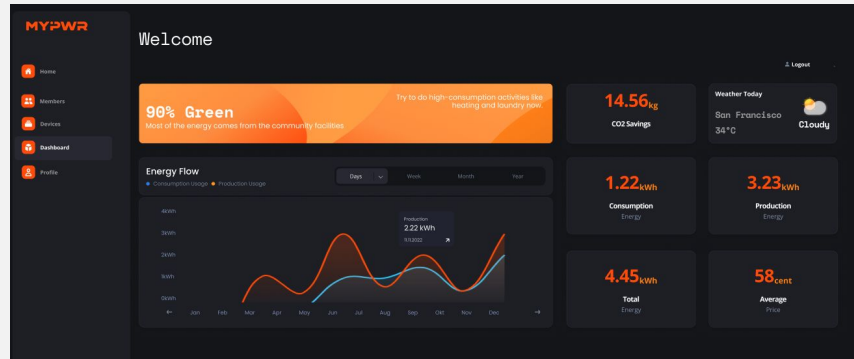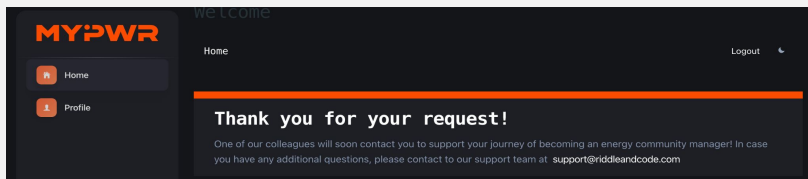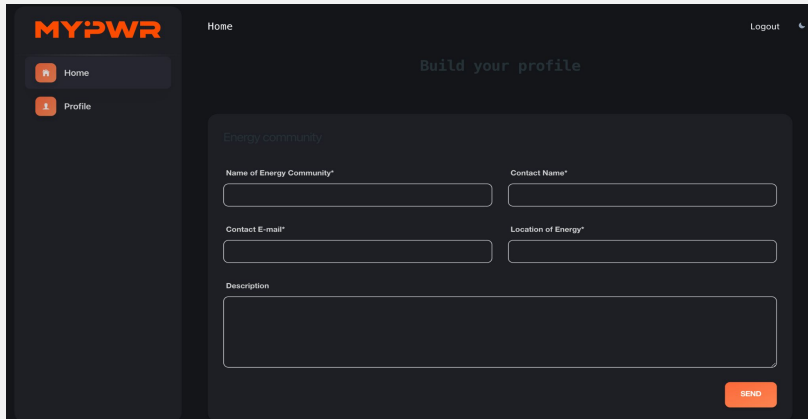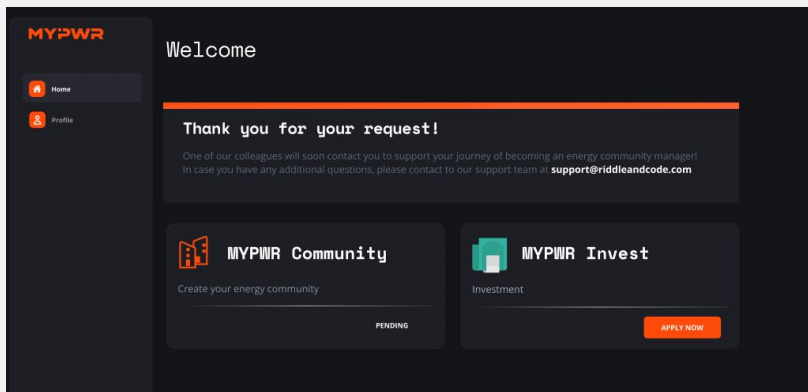
MYPWR _community

create and manage communities

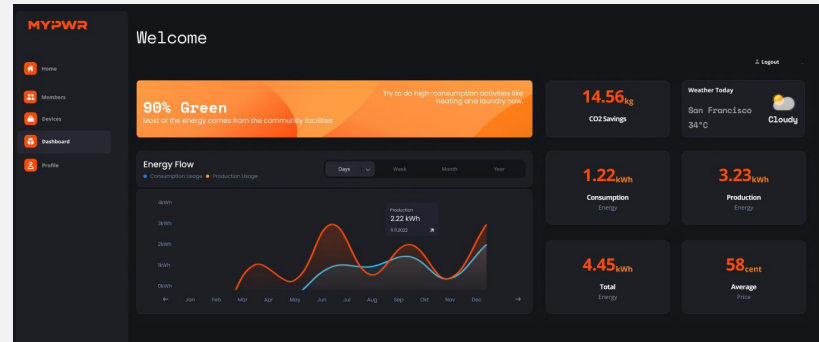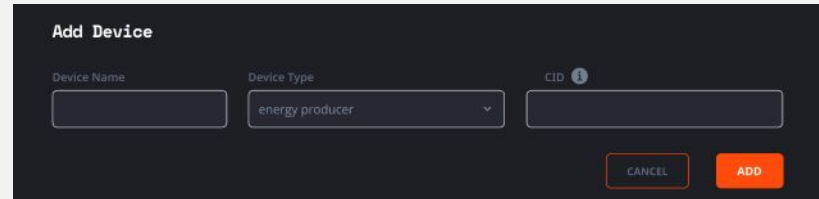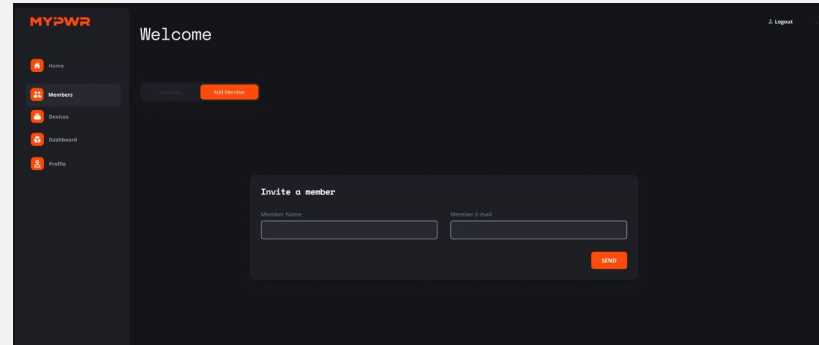1. registration

2. profil settings

3. e-mail confirmation

MYPWR _community

energy production and consumption in one place

R&C

3. invitation

4. device management

5. energy sharing and monitoring

MYPWR _invest

easily finance and invest in sustainable project

problem

Although there is general interest in crowd investment opportunities, only a small percentage of the population is utilizing these products due to skepticism towards complex projects and inadequate rewards for investors.

solution

MYPWR creates a digital twin of clean energy assets, allowing crowd investment platforms to offer new features. The source tokens represent the asset and one unit of energy, enabling direct energy deliveries to investors. This attracts millions of citizens to participate in the growing energy community.

features

#CryptoIdentities #SecureHardware, #ProductTags #DigitalTwins, #ProofOfProvenance #ProofOfOrigin #CarbonFootPrintTracking

MYPWR _invest
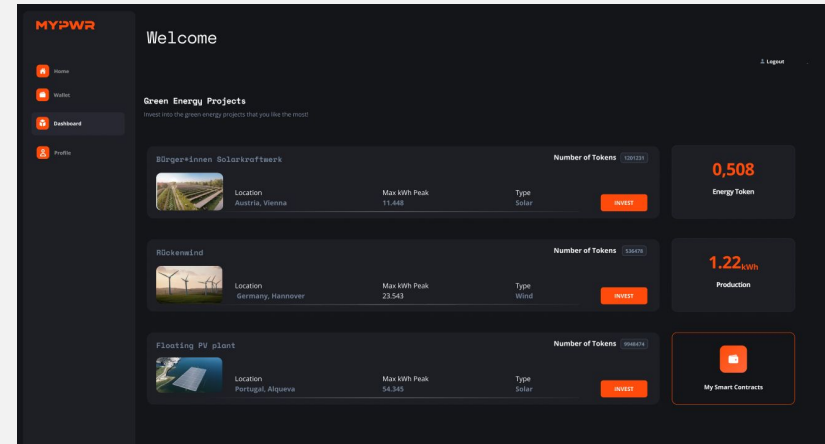
how it works

tech set-up

- Issuing machine ID
- Issuing Keys/Wallets
- Signing of master and transaction-data

legal set-up

- Select form of participation
  - Voucher
  - Sale & Lease Back
  - Sub-ordinate loan
- Assistance with issuing investor information

emission

- Issuing, underwriting of assets, minting of SOURCE TOKEN
- Fully automated and GDPR compliant processes via MYPWR Platform

reporting

- Minting of ENERGY-TOKENs based produced energy
- Live reporting of asset performance

trading & payout

- SOURCE-TOKEN integration into secondary markets
- ENERGY-TOKEN integration into energy markets. Credit notes on energy invoices, balancing markets, VPPs, energy comm. etc.

09

Implementation Example: Wien Energie "Citizen Power Plant"

MYPWR _track&trace
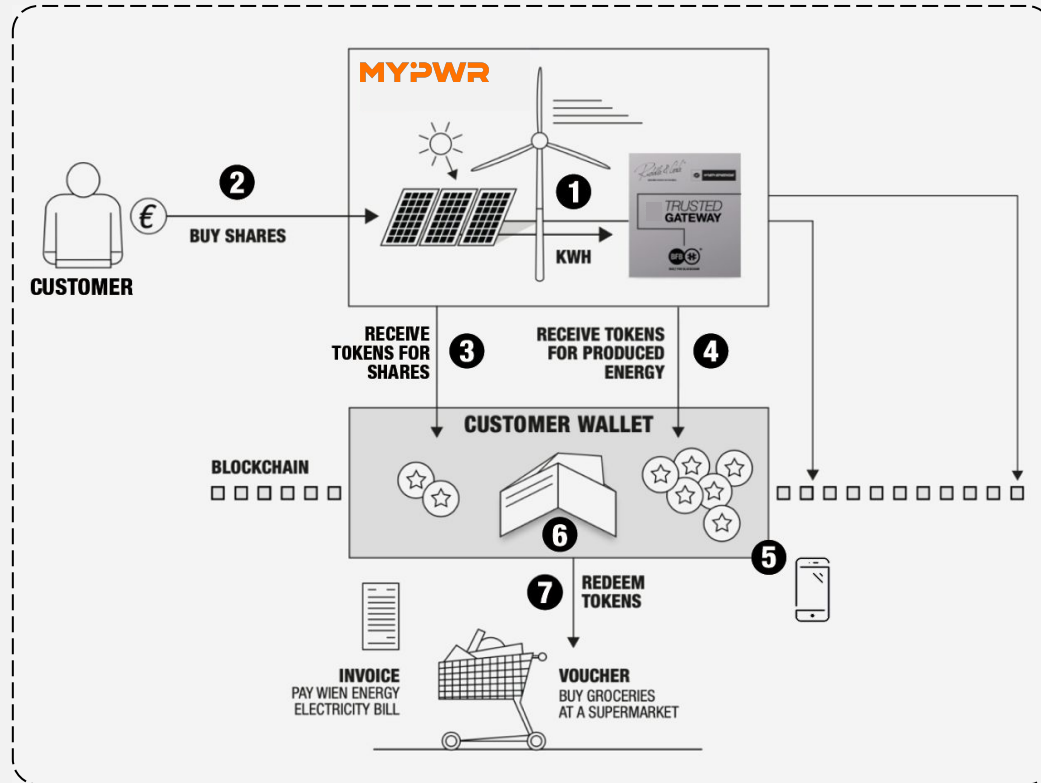
energy independence starts with data independence
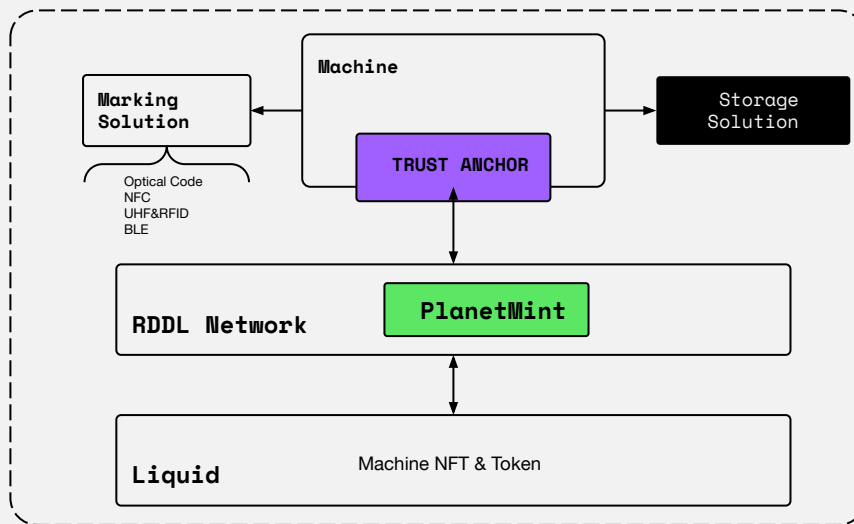
problem

Enterprises struggle to verify product authenticity and quality, and supply chain data is vulnerable to manipulation, causing transparency and accountability challenges.

solution

A secure, audited data registry with digital identities to store all necessary product data and attributes, including carbon footprint, enabling easy verification of product authenticity and quality for all supply chain parties.

features

#CryptoIdentities #SecureHardware, #ProductTags #DigitalTwins, #ProofOfProvenance #ProofOfOrigin #CarbonFootPrintTracking

Machine

Marking Solution

Optical Code
NFC
UHF&RFID
BLE

TRUST ANCHOR

Storage Solution

RDDL Network   **PlanetMint**

Liquid   Machine NFT & Token

06

MYPWR

FUTURE APPLICATIONS

green mobility

unlock the full value of CO2 certificates

- Tokenizing & attesting green energy production from the source
- Automated green energy distribution and settlement
- Autonomous payment and green-energy charging attestation with the Trusted Car Wallet
- Green energy/Carbon offset certification and integration in value added services (e.g. green fleet mgt.)

| green production proof | green charging & settlement | green driving & payment |

kWh Label

kWh Label

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green hydrogen

efficiently solving the additionality puzzle

- Trusted data access for all participants in near realtime
- PPAs with multiple suppliers
- Easy management of complex reporting process to fulfil additionality criteria
- Enables intraday market connectivity
- Data exchange across bidding zones (adjacent zones allowed)

| green production proof | green electrolysis | green h2 consumption |

kWh Label

kWh Label

hourly ppa monitoring

know where and when exactly your green energy has been produced and consumed

- Legacy reporting systems lack speed and precision/granularity, resulting in lost value potential for developer and off-taker
- MyPower PPA enriches each PPA with a powerful tool to track and match production and consumption data in 15 minute periods, giving producers a competitive advantage against players that rely on legacy systems
- All info needed by off-takers become available near real-time, enabling new ways to prove and communicate carbon neutrality, visualize the exact locations of energy sources and easier access to PPAs, unlocking new segments of potential off-takers

| green production proof | green consumption proof | holistic portfolio overview near real time |

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