# How Can Innovative "Technology+ Finance" Mechanisms be the Salvage to Climate Emergency?

--- Taking Blockchain Application in Small Scale Geothermal

Development as an Example

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## Main Pillars in Climate Negotiations to the UNFCCC





### Why is it so important?

The next 14 months are critical for global efforts to control greenhouse gas emissions, which hit a record high in 2018. Under the Paris Agreement, governments agreed to update their climate plans by 2020.

#### Who will participate?

COP 25 will bring together heads of state, climate officials, non-governmental organizations, youth groups and local movements and other non-state actors to respond to the climate emergency.

#### Climate Emergency

Climate science is clear: the world faces a massive ecological and humanitarian crisis. The climate emergency is the defining and most urgent issue of our time, and it cannot be avoided without a global shift away from fossilfuel dependency.

#### Climate Plans

Countries are scheduled to update their climate plans and boost their ambition by 2020 in line with the Paris Agreement. COP 25 is a moment to ensure they are aware of the 2020 calendar and start doing their homework.



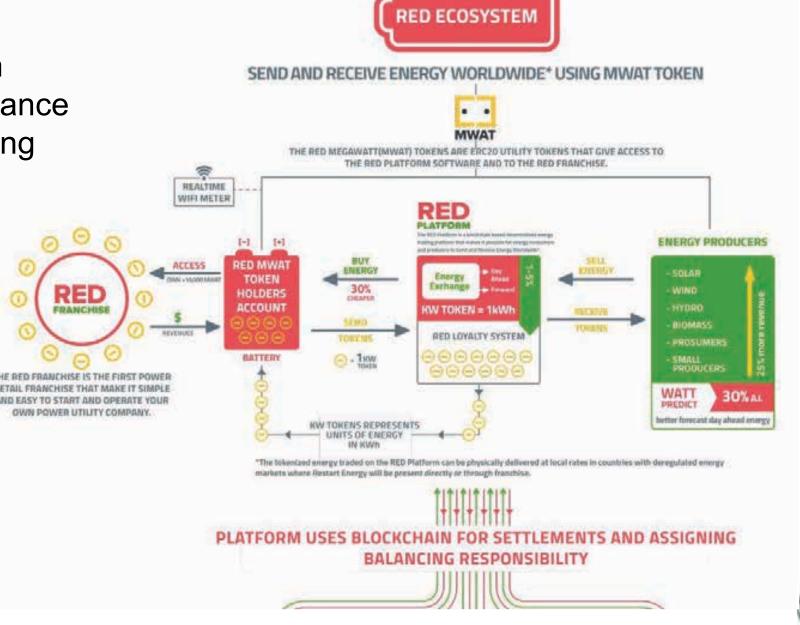


## How Energy Transition Can be More Effective and Efficient by Technology Application?

#### **Red Platform:**

An Innovative Blockchain Application for Green Finance and Carbon Market Trading

- Red MWAT Tokens are issued for smart transactions with BTH/ ETH or electricity.
- The Platform offers stakeholders (e.g. retailers) smart transactions by using tokens (blockchain technology).
- Linking consumers and power suppliers with transparent records.



## **RED Platform**

#### **Blockchain Technology**

- Power suppliers receive tokens through the platform
- **Blockchain Technology Power** Contract
- Balancing power grid supply
- Purchase, trade, energy storage
- Transparent transaction records

7.4 The RED Platform Design

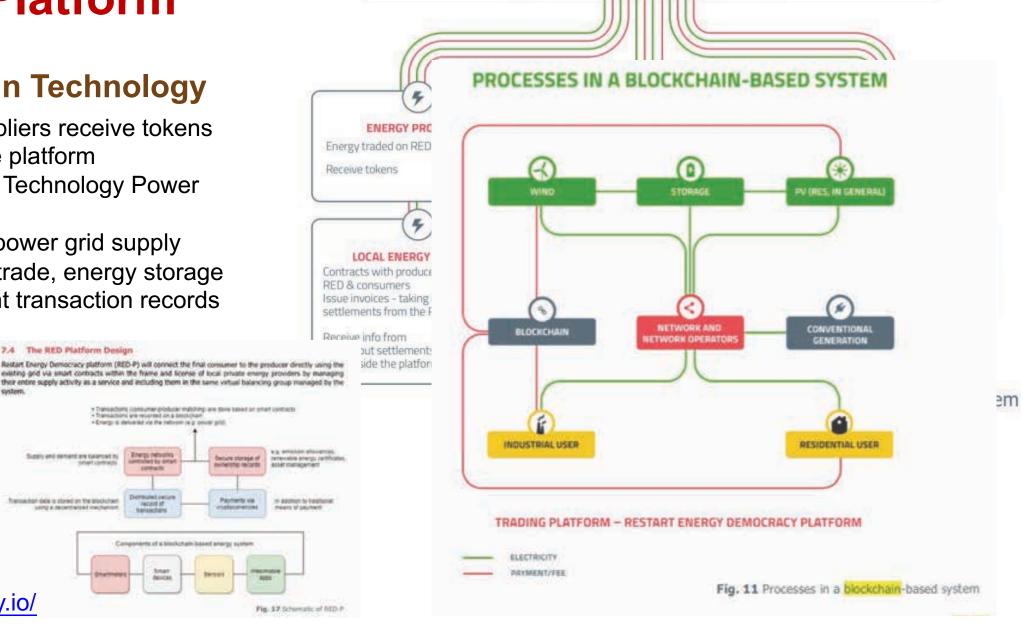
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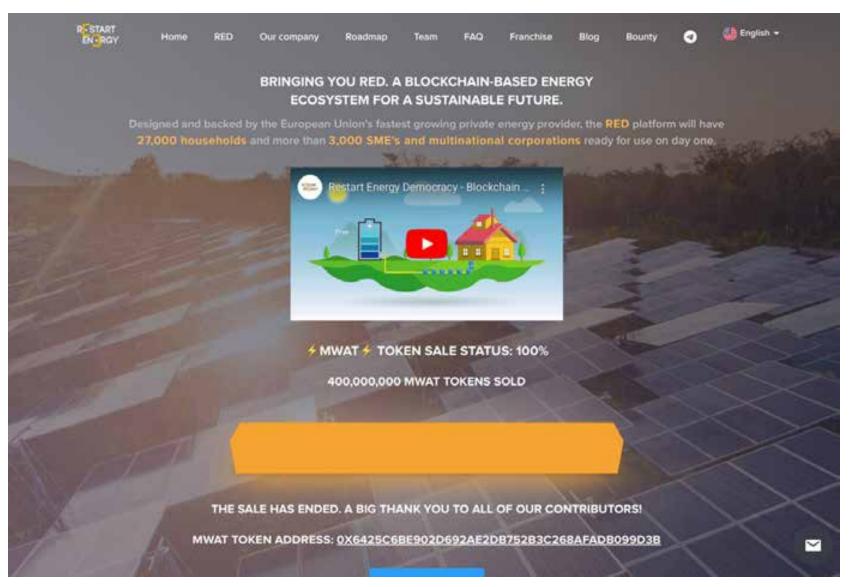
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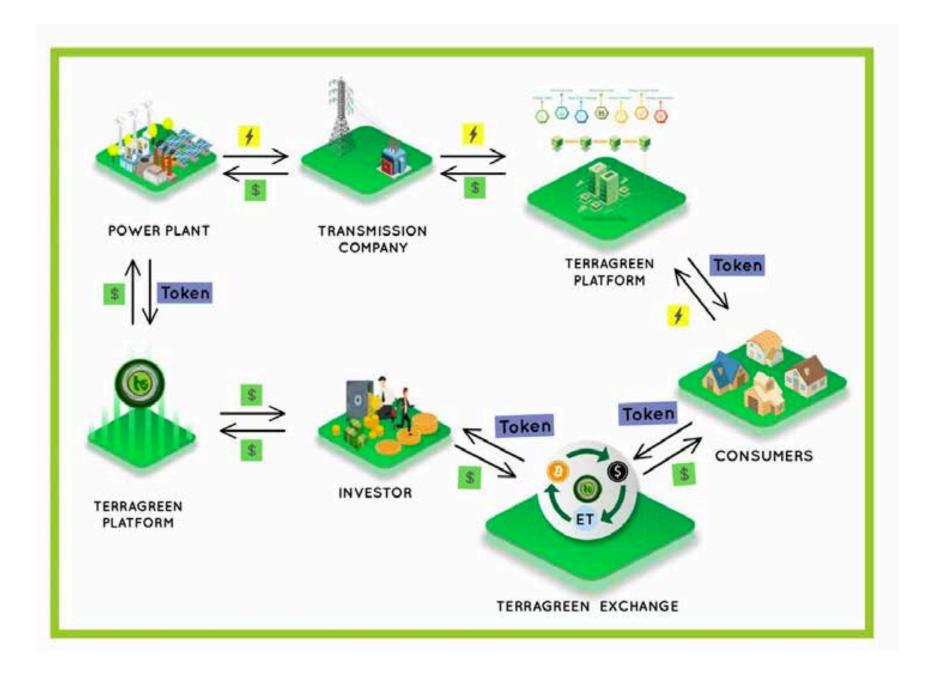


PLATFORM USES BLOCKCHAIN FOR SETTLEMENTS AND ASSIGNING **BALANCING RESPONSIBILITY** 

https://restartenergy.io/



http://restartenergy.io/





# **Blockchain Technology** for Stimulating Green

Finance and Carbon Market – *Terragreen* 

- Consumers can purchase green energy paid by tokens on the platform to link with power suppliers.
- Conduct effective and efficient transactions by blockchain technology for tracking, recording, and paying simultaneously.
- Multiple payment solutions: virtual currency (BTH and ETH), or material currency.

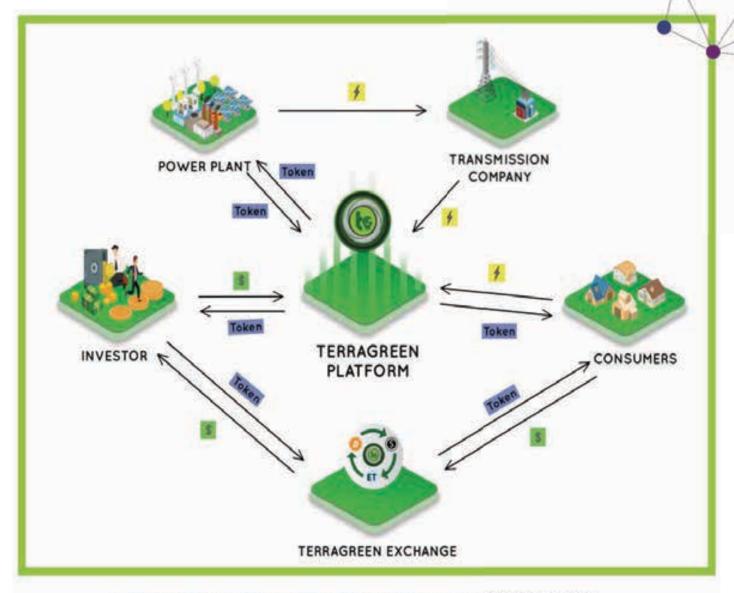
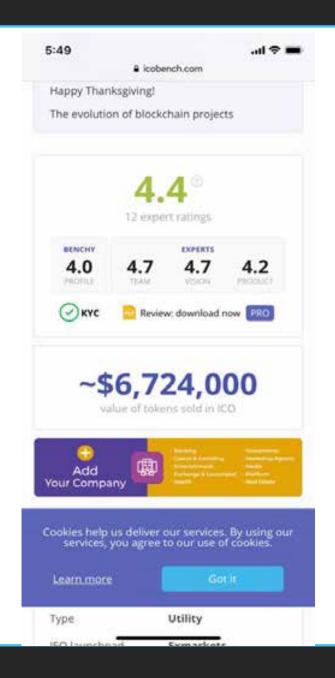


Figure 10: Stage Four of Energy Token DApps Development in TerraGreen Platform

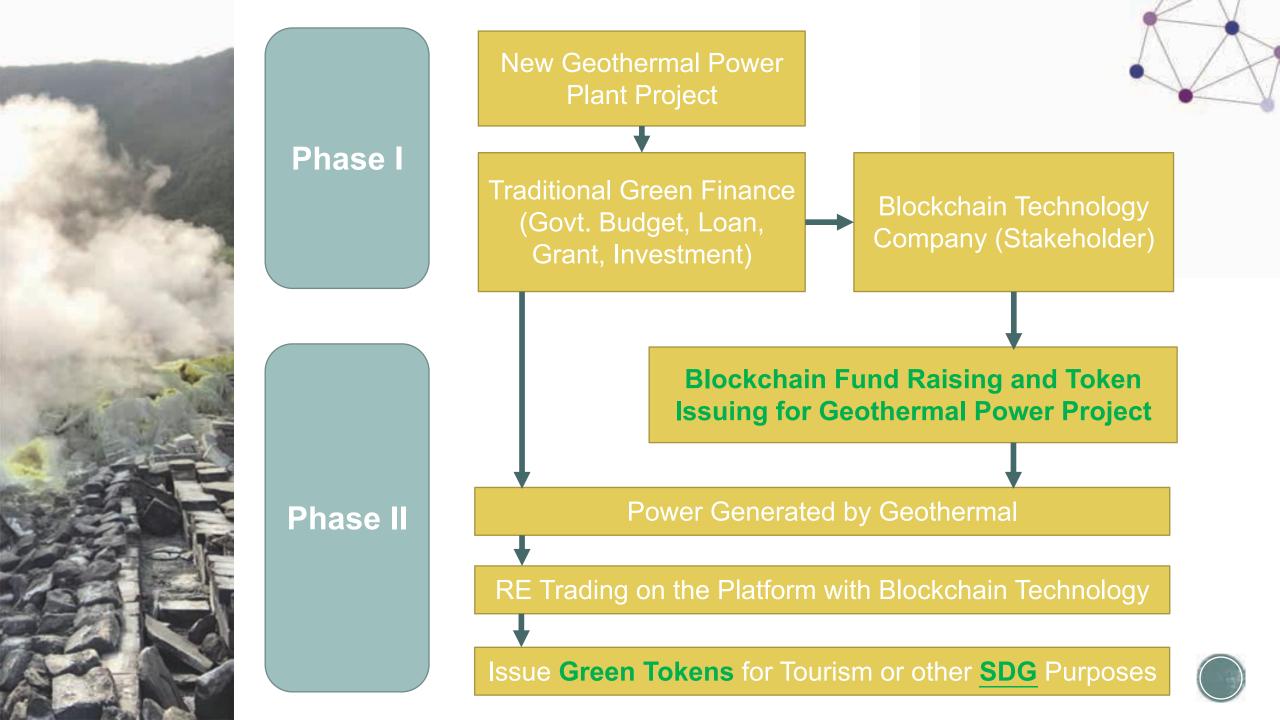




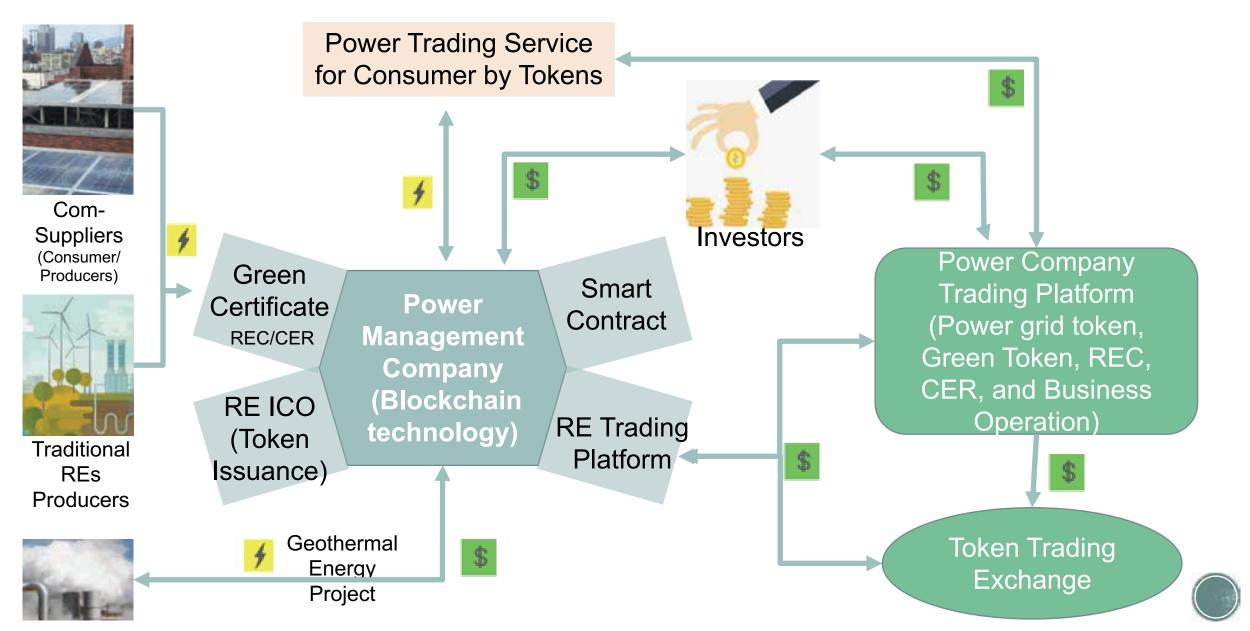
# A Technology Solution for Small Scale Geothermal Energy







## Blockchain Application for REs Trading





## Conclusions

- The blockchain technology provides us a good opportunity to plan on the innovative "technology + finance" mechanisms to tackle the Climate Emergency issues, especially:
- Facilitating private sectors' investment in RE development, so as to rationalize the energy portfolio, including "avoiding fossil fuel dependence."
- Enhancing effectiveness and efficiencies of carbon trading in both mandatory and voluntary markets.
- Promoting the power market liberalization and its linkage with Environmental, Social, and Governance (ESG) investment and CSR.
- Decreasing potential threats of loss and damage.





Thank you

