

Proof of Behavior Application to EcoMobiCoin



Paul-Marie Grollemund, Frederic Hayek, **Pascal Lafourcade**,
Kevin Thiry-Atighehchi, Ariane Tichit

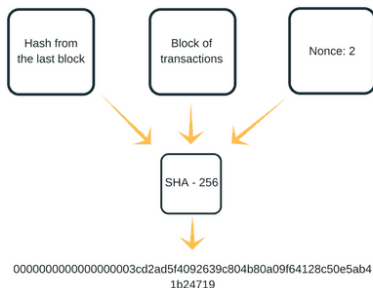
Blockchains & Cryptocurrencies
Grenoble, France, March th 2021

Bitcoin = Proof of Work

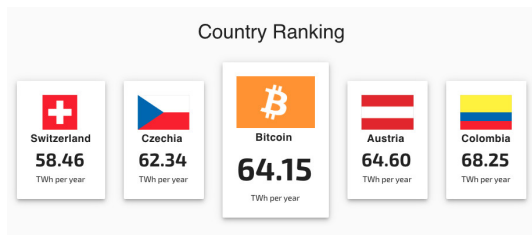


Proof of Work in Bitcoin

- ▶ Find a number satisfying an objective hash



- ▶ And highly energy consuming



Proof of Work

- ▶ Useless computations



Other crypto-monnaies



Classification I : Domy



Classification II : Clones of Bitcoin

STAR
WARS



STANDARD



6TH AIRSPEED CORPS
41ST AIRBORNE



501ST LEGION



7TH SKY CORPS
21ST AIRBORNE



9TH TRENCH BRIGADE



107TH STAR CORPS



CLONE
TROOPER

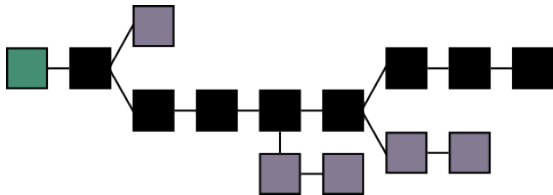
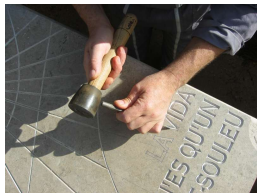
Classification III : More useful



Classification IV : Other Proofs



Roles of Miners



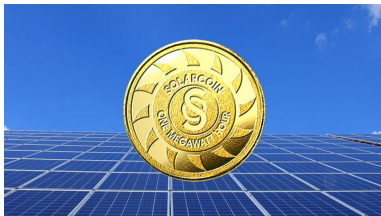
Contributions

Proof of Behavior

- ▶ Paradigm shift
- ▶ Incentivization of green behaviors
- ▶ EcoMobiCoin

Related Work

- ▶ SolarCoin



*"incentivize solar electricity
by rewarding the generators
of solar electricity"*

- ▶ MobiCoin



Outline

Motivations

Proof of Behavior

EcoMobiCoin

Conclusion

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Proof of Behavior (PoB)

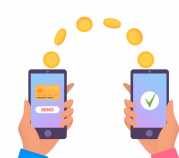


- ▶ No specialized hardware required for mining
- ▶ Anyone behavior helps to generate coins
- ▶ No waste of computational power

Proof of Behavior (PoB)

- ▶ Public blockchain
- ▶ Decentralization

3 actors



User



Prover



Verifier

Users



Provers



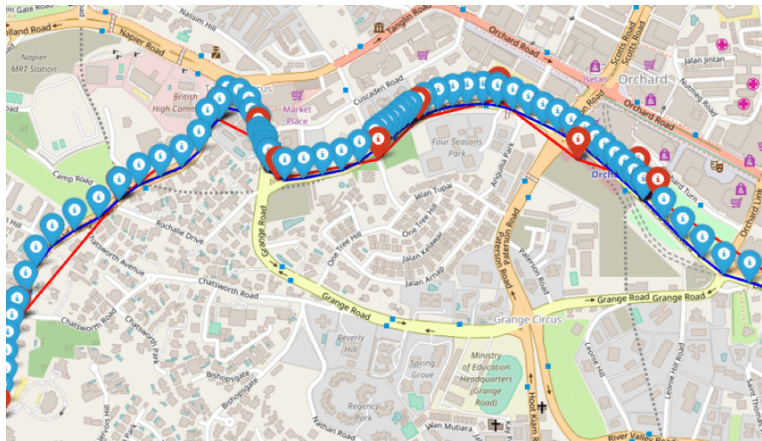
Who realize PoB



Verifiers



Who verify PoBs and transactions



Outline

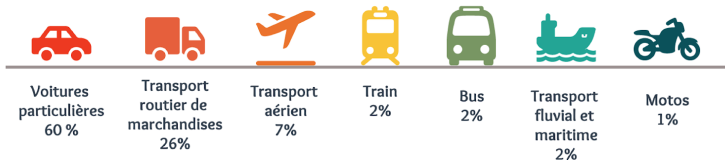
Motivations

Proof of Behavior

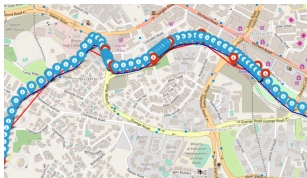
EcoMobiCoin

Conclusion

Quels types de transports consomment le plus de CO2 ?



EcoMobiCoin Proof of Behavior



EcoMobiCoin Temporal Demurage



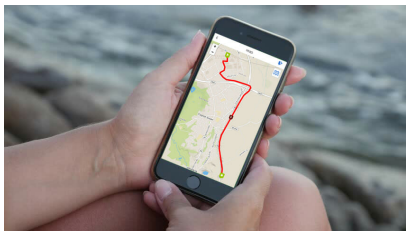
Reward = Demurage



Ephemeral PoB



Prover Reward = Distance



- ▶ Not enough water = Currency creation
- ▶ Too much water = Jackpot for verifier



Verifier Reward

- ▶ PoB is required



- ▶ Check transactions
- ▶ Demurrage Jackpot - Lost PoB



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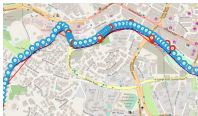
Conclusion

EcoMobiCoin = EcoResponsible PoB

3 Actors



PoB



Demurage



Life cycle



Thanks for your attention

Questions ?

Les
**BLOCK
CHAINS**

EN 50 QUESTIONS

Comprendre le fonctionnement et les enjeux
de cette technologie innovante



pascal.lafourcade@uca.fr