

2. Mobilitäts-Meetup Bern blockchain4mobility

Umsetzung von Blockchain Use Cases

Hack4Climate und andere Projekte

Michael Bützer

24.1.2018 um 13 – 17 h im Innospace



2017 CHALLENGE AREAS

1. **Identification & Tracking of Emissions**
(IoT, supply chains, NDCs/inventories)
2. **Carbon Pricing**
(markets & tax, linking across-borders, p2p exchange)
3. **Distributed Energy**
(developed & developing markets, operation & finance)
4. **Sustainable Land Use**
(accounting & finance, forests & agriculture, clean cities)
5. **Sustainable Transport**
(mobility & logistics, private & public)

Jury Members & Leading Experts



[Michael Casey](#)

MIT Media Lab



[Thomas Chrometzka](#)

GIZ



[Alexandre Gellert-Paris](#)

UNFCCC



[Julie Maupin](#)

Max Planck Inst.



[Dominik Schiener](#)

IOTA



[Fabian Vogelsteller](#)

Ethereum

Hackathon an Klimakonferenz (Cop23)

- Its objective is to leverage innovation, and to rapidly develop solutions for disruptive and tangible #ClimateAction.
- erstmaliger Link DLT / AI mit Klima / climateaction
- 100 Teilnehmer aus 33 Ländern, aus 17 pre-Workshops



Official Hack4Climate after movie

<https://www.youtube.com/watch?v=UOANny6i0QM>





THE FIVE WINNING CASES

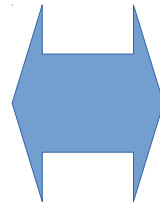
- **Gain Forest** (the overall winner) allows individuals in endangered regions to stake funds on the well-being of their forest. By way of a neural network, regions at highest future risk of deforestation are identified. A combination of satellite image comparisons and smart contracts ensures efficient and transparent transfer of funds from donors to responsible stakeholders ([website](#)).
- **Balcony Climate** enables individuals to capture data on air pollution and store it on the blockchain. All user data is then visualized and made accessible to the public on interactive air pollution maps.
- **Autonomy** is an end-to-end mobility platform, combining all means of public and private transportation. DLT as a backbone brings trust, and enables automatized payments between stakeholders. The data generated and shared, allows for a more efficient functioning of a city's transport infrastructure.
- **Plant Life** incentivizes sustainable behaviour of individuals. Through gamification, citizens are incentivized to plant trees and monetize captured CO2 emissions. DLT serves as an automated payment system and is used to store and manage tree assets.
- **Evoke** is a decentralized crowdfunding platform that visualizes climate change. It enables citizens affected, to share and store their personal #ClimateAction, and to source funds for further activities.



Moving forward: H4C Innovation Program

- Hack4Climate as Innovation Ecosystem for #ClimateAction
- uniquely positioned at intersection of DLT/AI and climate, with a community of talented and committed developers at its core
- next main hack event at COP24 in Katowice/Poland (dec. 18)
- H4C-format also includes: challenge preparation, pre-hackathons, and post-hack acceleration
- **Use case studio:** 6-month pre-coaching, 12-month coaching of winning teams for advancing cases, 6-month post-coaching (with a view of partner-accelerator programs)
- **Strategic Partner Program** (around 10 partners, existing and selected new stakeholders, especially for supporting use cases)

Megatrends in der Mobilität werden Blockchain-uses-cases beflügeln



Use case: Autonomi (I)

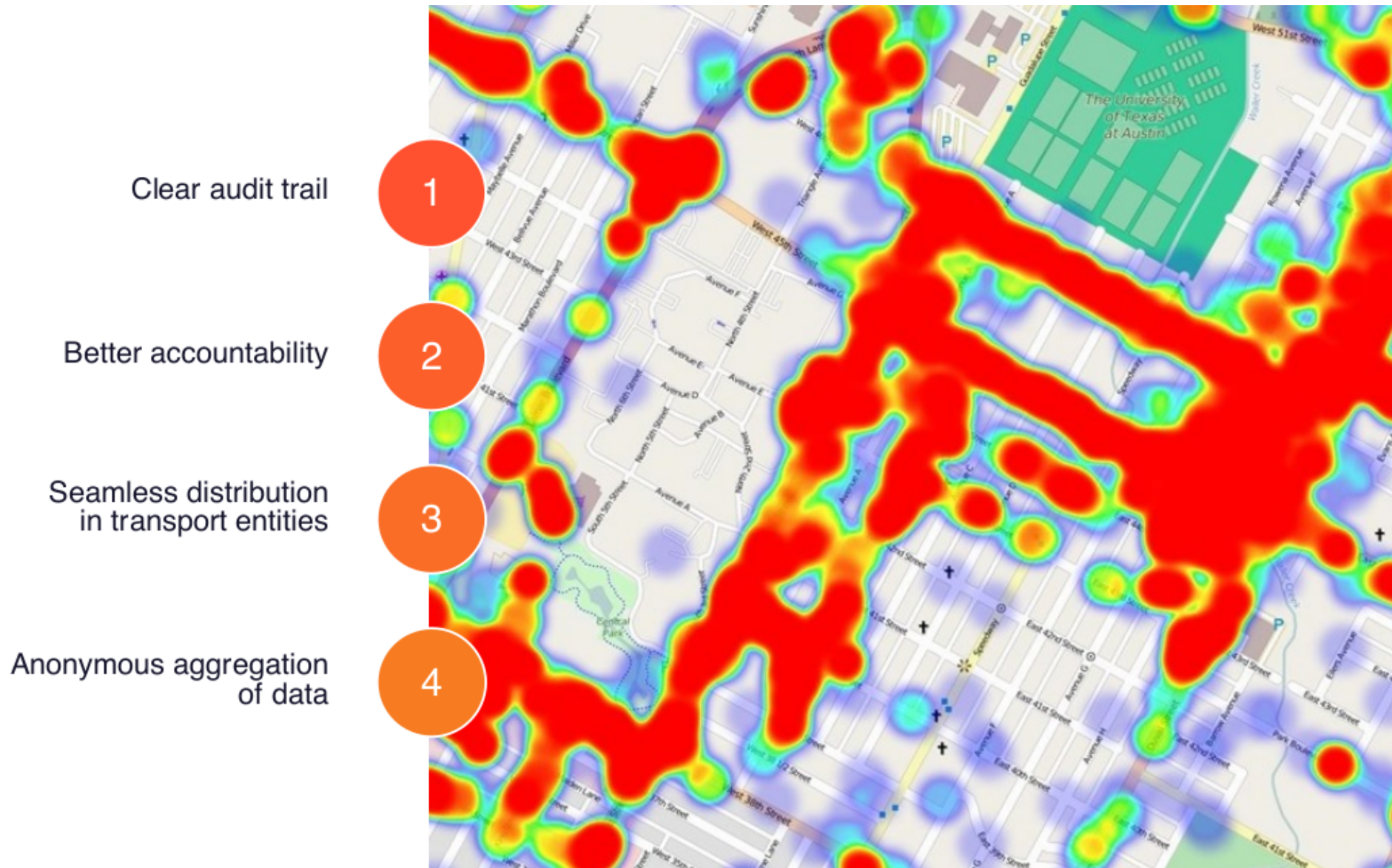


Autonomi

The logo features the word "Autonomi" in a bold, sans-serif font. The "Auto" part is dark blue, and the "nomi" part is orange. A thick, diagonal orange line runs from the top-left towards the bottom-right, passing through the text. Behind the text, there are several overlapping, curved orange and yellow brush strokes that create a sense of motion or a stylized 'A' shape.

A Blockchain-based Urban Mobility Framework

Use case: Autonomi (II)



Use case: Autonomi (III)

#POLICY

Max cars

Establish **maximum number of cars actually needed by a city** and putting a ceiling number to it by taking a margin

03

Vehicle health certificates

Automate **vehicle's health monitoring** and present minimum requires for power-efficient vehicles

02

Short-term insurances

Allows possibilities for short term insurance policies that **protect drivers, passengers and vehicles**

01

Use case video: Autonomi (IX)

Ab Minute 11.17

https://www.youtube.com/watch?v=Eolj2_0LpZs

Use case: Car Dossier

- **digitales Dossier** für Fahrzeuge auf Blockchain-Basis
- AdNovum, in Zusammenarbeit mit Uni Zürich, der Hochschule Luzern, AMAG, AXA, Mobility und Strassenverkehrsamt Aargau
- Auf Basis einer Blockchain mit Community Approach in Kombination mit Smart-Contracts umgesetzt (KTI-Projekt)
- alle relevanten Informationen über den gesamten Lebenszyklus eines Fahrzeugs nachvollziehbar und sicher abgelegt werden
- Informationen können von verschiedenen Stakeholdern eingespeist und genutzt werden, z.B. Fahrzeughersteller, Teilelieferanten, Versicherungen, Importeure, Garagen, Occasionshändler und -portale, Fahrzeugbewerter, Strassenverkehrsamt, Flottenmanager, private Käufer, Verkäufer und Mieter, Vermieter und Verwerter.

Use case: Car eWallet platform

- **Car eWallet:** ZF Friedrichshafen, UBS und IBM bringen Blockchain-Technologie ans Fahrzeug
- Nutzen und Abrechnen von Services rund um das Auto vereinfachen
- Bezahlvorgang beim Betanken von Elektroautos, automatisiertes Bezahlen von Parkplätzen und Autobahnggebühren, Paketzulieferungen im Kofferraum oder die Vermietung privater Wagen über Car-Sharing-Portale
- Blockchain-Technologie von IBM, basiert auf Hyperledger Fabric

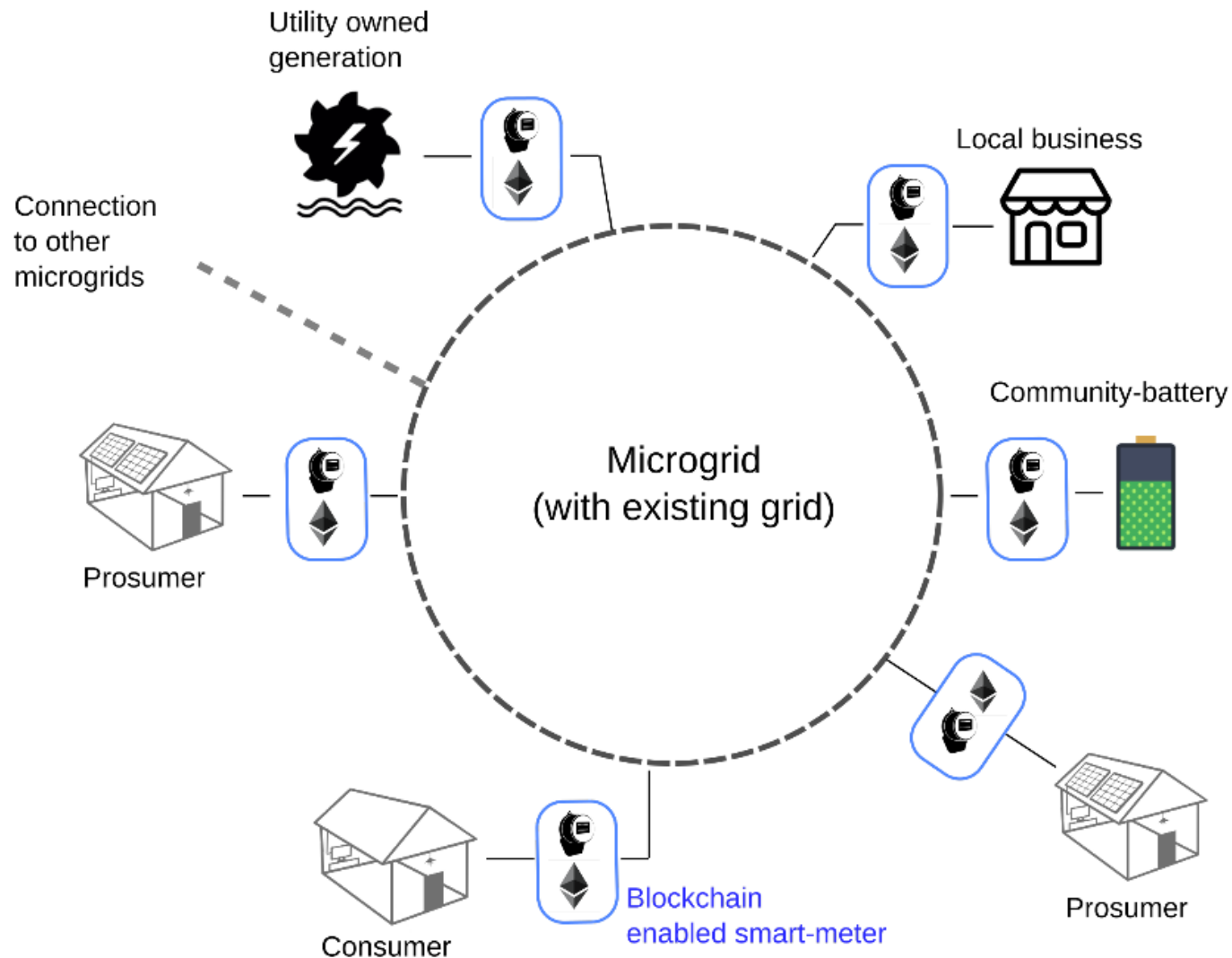
CAR EWALLET AUF DER CES 2018

Künftig bezahlt das Auto selbständig

Autonom fahrende Autos müssen nicht nur selbst fahren können, sondern auch simple Aufgaben wie das Bezahlen der Maut erledigen können. Car eWallet bietet eine Lösung.

Use case PowerID: Peer2peer Energy

Flagship project SFOE (3)



Danke fürs Zuhören!

Diskussion und Fragen

Michael Bützer

<https://ch.linkedin.com/in/michael8005>