Climate change mitigation and adaptation: Getting into action

Juerg Fuessler, INFRAS and Climate Ledger Initiative
UNFCCC SB50 Side Event in Bonn, 25 June 2019
The Climate Ledger Initiative (CLI)

Mission: to accelerate the momentum for climate action under the Paris Agreement by fostering the use of the emerging blockchain technology.

CLI’s activities:

• **Analysis and research**
• **Innovation use cases**
• **Platform for exchange and joint learning**

Supported by the LIFE Climate Foundation, Government of Liechtenstein, Government of Switzerland, and EU’s Climate-KiC. [climateledger.org](http://climateledger.org)

Collaboration with Network of partners including UNFCCC Sec., World Bank

The CLI is jointly operated by: INFRAS and the Gold Standard Foundation

Release COP Katowice 2018: *Navigating Blockchain and Climate Action Report*
The Paris Agreement: a historic milestone
Katowice: «technical COP», IPCC SR 1.5, [rulebook]
Accelerating Paris Agreement implementation with Blockchain and other innovative information technologies

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<th>Backbone – UNFCCC level information system(s) (WP1)</th>
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<td>Blockchain technology – potential of decentralized ledger approaches for improved accuracy/ transparency/ trust, accurate tracking, distributed/ pervasive sources, smart contracts, double counting, etc.</td>
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Source: Climate Ledger Initiative
CLI 2018 Navigating Report launched at COP
Download on www.climateledger.org

Source: Climate Ledger Initiative/ Gold Standard
Digitizing MRV
USE CASE – CLEAN COOKING

Automation of aspects of the MRV process by:

- Implementing use of IoT – Stove Usage Monitors
- Capturing data, categorising and time/stove stamping using DLT
- Automating the calculation process through an online application
- Pre-conditioning certain parameters for automatic verification using AI
- Targeting higher risks using AI driven verification
- Automating the review and issuance process
- Updating the standard/methodology to empower this approach
USE CASE – WOOD TRACKING PROTOCOL, WTP

1. Logging
   - Logging relevant Data (Location/Time/Size/Species) is generated via Smart Phone and stored on distributed ledgers.

2. Transport
   - Transport verifies Logging Data by applying a coherence algorithm. If check is positive – logger receives automated payment.

3. Processing
   - Processing receives wood and verifies data for coherence. If check is positive – transport receives automated payment.

A project supported by the SDC Office Peru: www.wtp-project.com
USE CASE – WOOD TRACKING PROTOCOL, WTP

1. Mobile numbers will be used to register WTP accounts
2. Generation of GPS coordinates, Longitude/Latitude/Precision Altitude
3. Timestamp & adding of tree specific information: volume, species
4. Data is stored immediately in a secure, encrypted and temper-proof manner using DLT
5. Visualisation of interlinked WTP data to provide traceability of the timber

A project supported by the SDC Office Peru: www.wtp-project.com
USE CASE CC ADAPTATION – WATER MANAGEMENT

IoT systems to reduce water losses at utilities and improve their efficiency and capability to cope during increasing droughts
• Smart meters connected to IoT network + blockchain-aided online platform to manage water consumption data, automatic curtailment and reconnection, and mobile money payment facilitation for water utilities
• Smart-phone app allows consumers to track data and be billed accurately, increasing trust
• DLT ensures payments made are not tampered with, reducing fraud

Source: EED Kenya
New CLI program 2019 – 2021: we are looking for promising use cases and partners
Register on www.climateledger.org to get involved

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