Ecological planning Blockchain, a game changer ?

Prepared by The-EPE

With insights from Positiveblockchain and Blockchain for Good associations

Blockchain and sustainable development?

Rising attention through multiple report **exploring opportunities** and barriers for the use of blockchain technology to transit toward sustainable development. Among these reports:

- Blockchain for Good
- UNEP
- UN Task Force on 'the Future of Nature Markets'
- GIZ
- WEF...

As well as multiple initiatives and **proof-of-concept**, including:

- FAO
- EU
- OECD...

Many of the identified use cases have yet to demonstrate their effectiveness and **contribution to the SDGs** over time.

The **virtuous mechanisms** behind the crypto-economy have yet to be proven, and much research and experimentation is yet to be done.

Some leading countries: NL and CH in Europe, South Africa, Singapore

With the current critical situation worldwide, and in Europe especially, it calls for a change in "the rules of the game".

It's time to promote societal innovations to accelerate the transition.

Such transition require to examining whether and how disruptive class of technology such as blockchain could contribute to support the change.

Consolidate democracy

Improve fight against corruption

Secure a just transition and human rights

Support change in our lifestyles

Allow a systemic and multi-actor approach

Pave the way for new models for the value chain

Link rainforest and scarce **resource management** and public debt guarantees Reduce **armed conflict** over minerals and land ownership

Accelerate inclusive and sustainable finance

Incentivize sound risk management, strong solidarity and social innovation

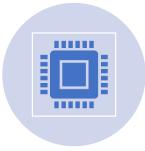
For the issues of climate, biodiversity, and other planetary limits, it is necessary to be able to launch 'societal innovations'.



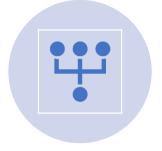
Revolutionize the **management of common goods** such as the primary forests, biodiversity sanctuaries, or even safe water and air quality.



Reward virtuous behavior and redistribute value in a different way to fight against inequalities and ensure a just transition.



Insure **meaningful use of technology** to overcome critics regarding energy and computing power associated with blockchain, and therefore have global services outweighing the production cost of transaction.



Move to **new models of coordination** and collaboration, such as Decentralised Impact Organisations (DIOs) built on DAOs and ReFi for climate verification, staked commitments & collective action.

Blockchain technologies A *Game Changer,* according to the World Economic Forum (Davos)

"See-through" supply chains	Decentralized and sustainable resource management	Raising the trillions – new sources of sustainable finance	Incentivizing circular economies
Transforming carbon (and other environmental) markets	Next-gen sustainability monitoring, reporting and verification	Automatic disaster preparedness and humanitarian relief	Earth-management platforms (climate, biodiversity, oceans, waters, disasters)

Blockchain for Good association in France researches on concepts, implementations and impacts behind blockchain initiatives in support to SDGs through 12 main themes.

- 1. Identity and property
- 2. Health
- 3. Gouvernment & democracy
- 4. Education & employment
- 5. Finance & insurances
- 6. Aid, charity & philanthropy

7. Agriculture & food

- 8. Supplychain & logistic
- 9. Environnement & climate

10. Energy

- 11. Digital communication
- 12. Digital content & art

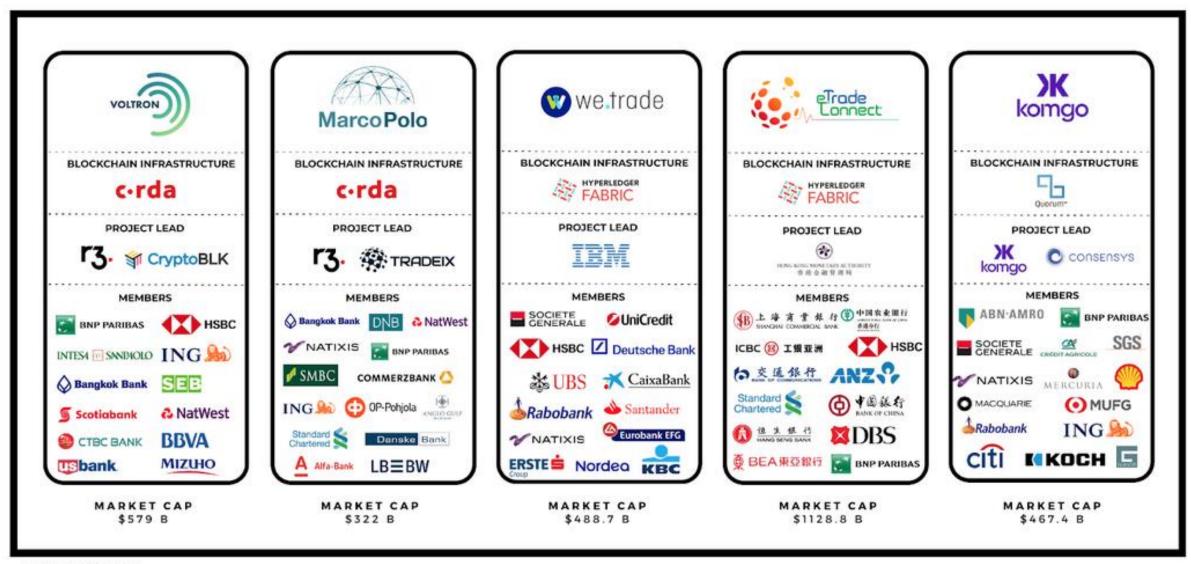


The new report 2020-2022 from Blockchain for Good will be available in June 2022 (French version).

Learn more about their work and register at www.blockchainforgood.fr to get your free copy.

BLOCKDATA

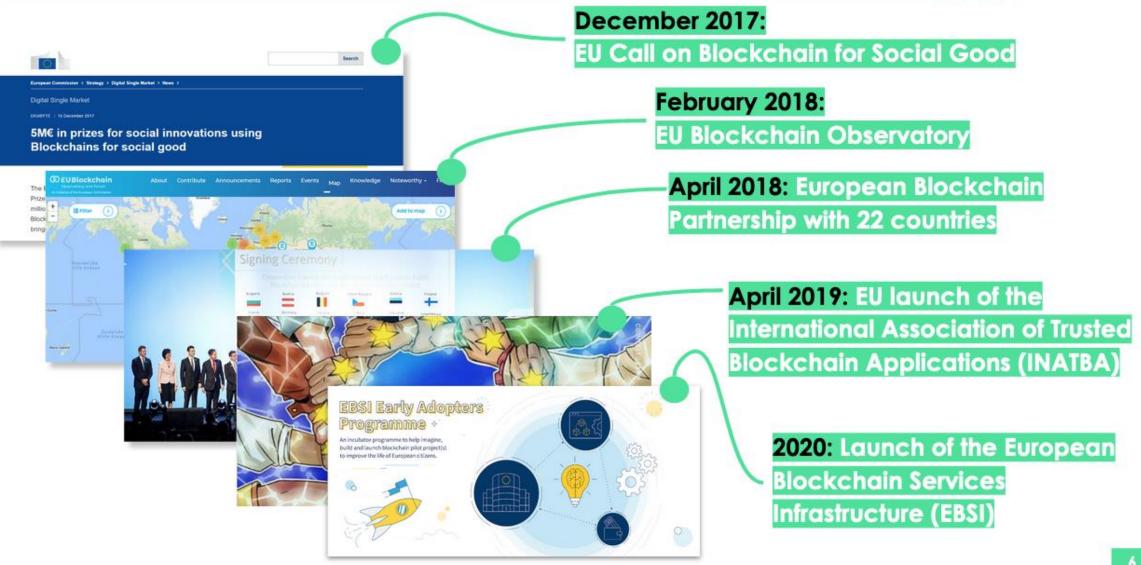




Sources: Blockdata.tech

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The EU has taken steps towards real solutions since 2017...

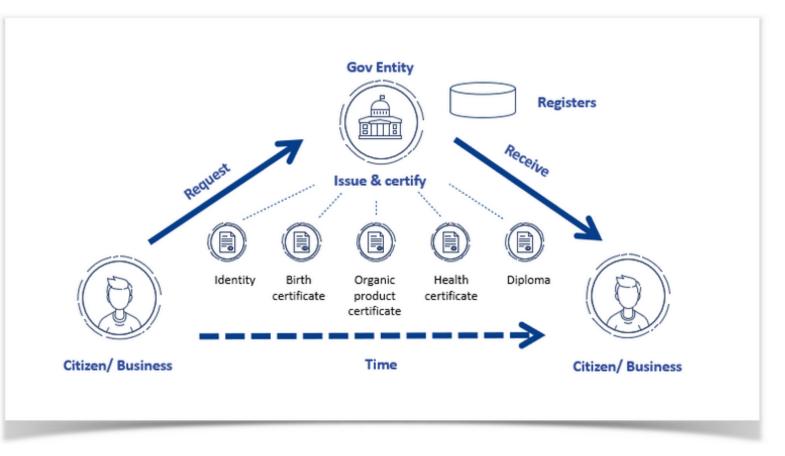


Example: ESBI is an initiative seeking for solutions for European citizens

The Commission is working with EU Member States (and beyond) to build the European Blockchain Services Infrastructure – EBSI

In early 2021, the Early Adopters programme started working directly with Member States to implement EBSI use cases:

- (Self-Sovereign Identity (SSI)
- Diplomas
- Traceability
- Trusted data sharing



Can we be satisfied with the current state of progress on the part of governments and the EU towards 'transformative decision making by policy makers'? Stimulus plans and the use of public funds (Next Gen EU) are not supported by any significant use of technology, especially blockchain

Public procurement is not yet interested in blockchain-based solutions

There are no plans yet to link blockchain, SDOs and MRVs in a European or nationale situation room

Public Banks (except KfW: Blockchain Trubudget) are not leaders in blockchain application for SDGs

The 'Africa-Europe Digital Partnership' does not mention a blockchain strategy even though GIZ has published a report on 'opportunities' for Africa

The EU DG Recherche has launched one call for tender on 'blockchain and agri-food systems'.

The EU should be declared 'in transformation' to Regenerate the Planet and Regenerate Europe.

- Trace **climate and biodiversity investments decisions**, blockchain value chain and finance initiatives (Internet 3.0).
- Transform the CAP with blockchain for agri-food system.
- Empower the 'spleeping giants' in a value chain and circular economy perspective, in particular in the fields of food, textiles, minerals.
- Equip with blockchain procurement agencies & consumers.
- Adapt **EU funding mechanisms** & leverage blockchain to figth against corruption in Europe and build the 'confidence society'.
- Equip **Public Banks** with blockchain to trace funding and impact of long term investments.
- Co-manage an Africa-Europe Blockchain for SDGs Partnership with 5 Flagships*.

* see overview of blockchain applications in Africa by Positive Blockchain and Blockchain for Good

European Ecological Planning of an EU of 36-37 Members and Web 3.0. for a 'Trusted Society'.

Blockchain priority action areas for the EU in 2022-2023:

Flagship 1. Sustainable and Inclusive Finance. The impact of funding on the basis of its taxonomy of sustainable investments and the fight against corruption.

Flagship 2. Trade 2026 & Business. The Commission has until 2026 to set up a digital network to monitor its commitments, particularly in strategic sectors such as batteries, agri-food systems and forests, international trade. **Due Diligence**. The European Commission proposal on requiring EU companies to conduct "due diligence" processes related to their human rights and environmental impacts. Some businesses would also be required to align their business strategies with limiting global warming to 1.5 degrees Celsius. The directive also extends to companies' subsidiaries and value chains.

Flagship 3. Empower in the digital age : participatory democracy and citizens empowerment along the value chain.

Flagship 4. Africa-Europe Blockchain Partnership for SDGs with its own 5 Flagships.

5 proposed flagships

5 flagships are considered. And it is envisaged that these flagships could be taken over by Economic Communities of African States with the EU and European States in a spirit of "partnership between equals". This means very expressly that each of the EU's policies in Africa would be the subject of a blockchain monitoring eco-system to be designed:



Sustainable energy and climate

Two "pilot regional areas" are envisaged (MENA, East Africa)



Agri-food systems and tenure security

Two "pilot regional areas" are envisaged. (East Africa-Great Lakes and West Africa)



Forests and redistribution of value

Two "regional pilot zones" are envisaged (Central Africa and Southern Africa)



Minerals

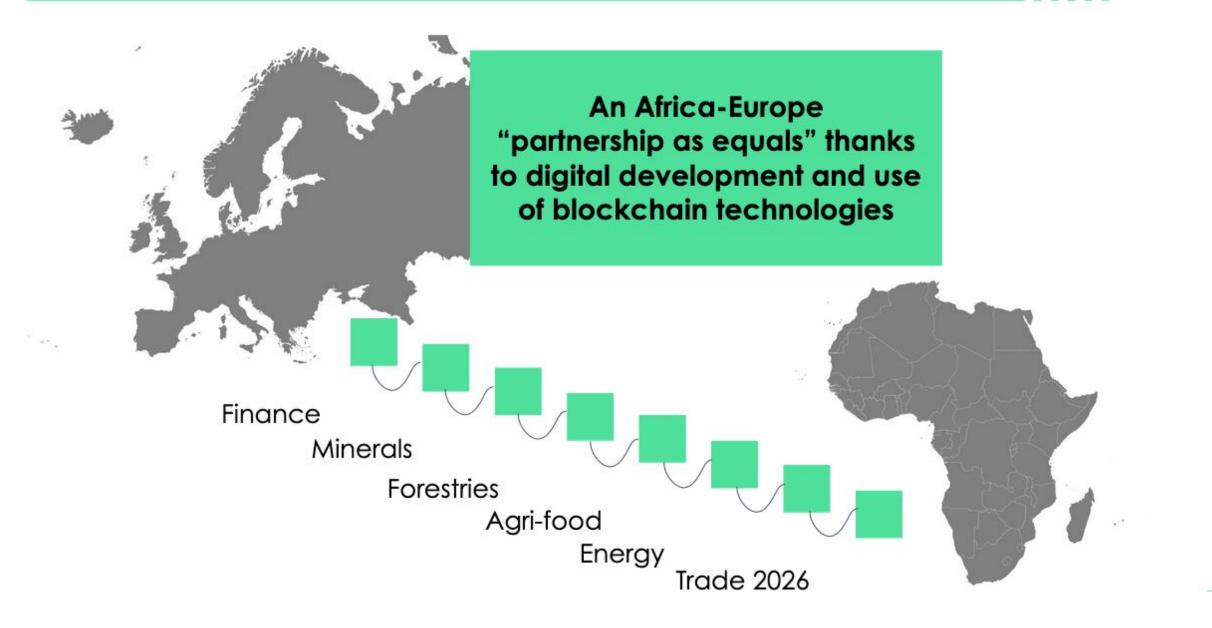
Within the framework of the raw materials alliance with a Cobalt pilot initiative (from the artisanal mine to TESLA) and on the other hand an initiative between the EU and 4 African countries (DRC, Morocco, South Africa, Guinea)



Trade 2026

The basis will be the STOA report to the European Parliament on blockchain and international trade and will aim to support the implementation

And a "Game Changer"



Un agenda pour la RDC ?

- L'identité numérique dans toute la RDC et son impact sur la démocratie
- La sécurité foncière des petits agriculteurs dans l'Est du Congo
- La justice et la protection des enfants des rues et dans les mines artisanales
- Rémunérer les petits (agriculteurs, forestiers, gardiens de parc)

(i) dans le domaine de la séquestration du carbone dans la tourbe de la forêt ou dans la gestion nouvelle des terres agricoles.

(ii) dans leur relation avec la chaîne de valeur et les 'commodities traders'

- La chaîne de valeur Cobalt (identifier les acteurs de la chaîne, géolocalisation des matières extraites, protocoles, processus, règles)
- Le monitoring des revenus miniers et leur mise au service des communautés
- La certification des diplômes étudiants pour toute l'Afrique en coopération avec EBP
- La gestion de la forêt tropicale et la dette pour l'Afrique Centrale

The-EPE is a think-tank and do-tank focusing on...

- 1. **Managing the commons** (including shared commons, social commons and common access to the internet, social innovation in service of the collective) :
- 2. Action 1.1 include **natural ecosystems** (European Biodiversity Partnership Member, Member of the EIP Raw Materials High Level Group)
- 3. Action 1.2 empower through **participatory democracy** in the digital age (European Climate Pact Ambassador, Council for Inclusive Capitalism Ally)

We are supporting **Blockchain as value chain game changer** for :

- 1. Action 2.1. citizen centric finance (Partnership with Responsible Finance and Investment Foundation)
- 2. Action 2.2. systematic management of EU funds
- 3. Action 2.3 public and private **procurement**
- 4. Action 2.4 **transformation** towards long term sustainability as captured in the SDGs
- 5. Action 2.6 an Africa- EU Blockchain for SDGs Partnership



G G En quoi les blockchains participent-elles à la réalisation des Objectifs de développement durable ? Qui usurpe, qui innove, qui invente ?

[BLOCKCHAIN FOR GOOD] Association française loi 1901 ayant pour objet principal de contribuer à la **recherche** en matière d'**innovations numériques** qui concourt à la réalisation des **Objectifs de Développement Durable** de l'agenda 2030 des Nations Unies.

ECOSYSTEME COLLABORATIF

Partenariat scientifique

Louis Bachelier

Le Groupe Louis Bachelier est un réseau de recherche scientifique qui favorise le **développement durable en économie et en finance**. Il héberge plus de 60 programmes dans quatre transitions sociétales : environnementale, digitale, démographique et financière. Partenariat *data*

PB PositiveBlockchain.io

PositiveBlockchain.io est tout à la fois une base de données ouverte, un média et une communauté qui explorent le potentiel des technologies **blockchain à impact social** et environnemental. Ils aiment à s'appeler des « Blockchain Positivists ».



Partenariat académique

et financier

La chaire a été créée par l'École Polytechnique, avec le soutien financier de Capgemini, NomadicLabs et la Caisse des dépôts. Elle associe des chercheurs et enseignantschercheurs en informatique et en économie afin de préparer les étudiants à favoriser ou soutenir l'innovation dans le domaine émergent de la blockchain et des technologies associées.

MOYENS D'ACTION

Constitution d'un annuaire mondial, gestion et mise à disposition *open source* d'une base de données dynamique et actualisée des projets « blockchain & développement durable ».

Publication annuelle d'un rapport « Blockchain & développement durable » basé sur l'analyse de la base de données, des études de cas d'usage, et la modélisation d'indicateurs #BlockchainSDGs.

Prototypage et mises en œuvre de services blockchain sous la forme de programmes de « recherche / action » autour des modèles de développement durable et partage des retours d'expérience.





Pour soutenir l'association

<u>https://www.helloasso.com/associations/blockchain-for-</u> good/adhesions/soutenir-les-travaux-de-blockchain-for-good Plus d'information sur <u>www.blockchainforgood.fr</u>

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