

2020 Vision

Looking forward clearly



Blockchain: what is it and how might it change our world?

Sophie Gilder

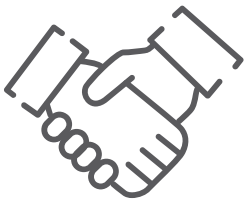
Head of Blockchain and Artificial Intelligence

October 2019

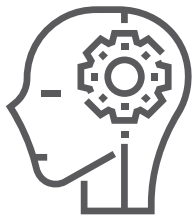


Innovation at CommBank

Collaboration & Partnerships



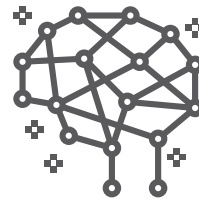
Human Centred Design & UX



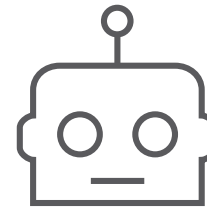
Experimentation + Commercialisation



Blockchain & IOT



Embodied AI / Social Robotics



Quantum computing



What is Blockchain?

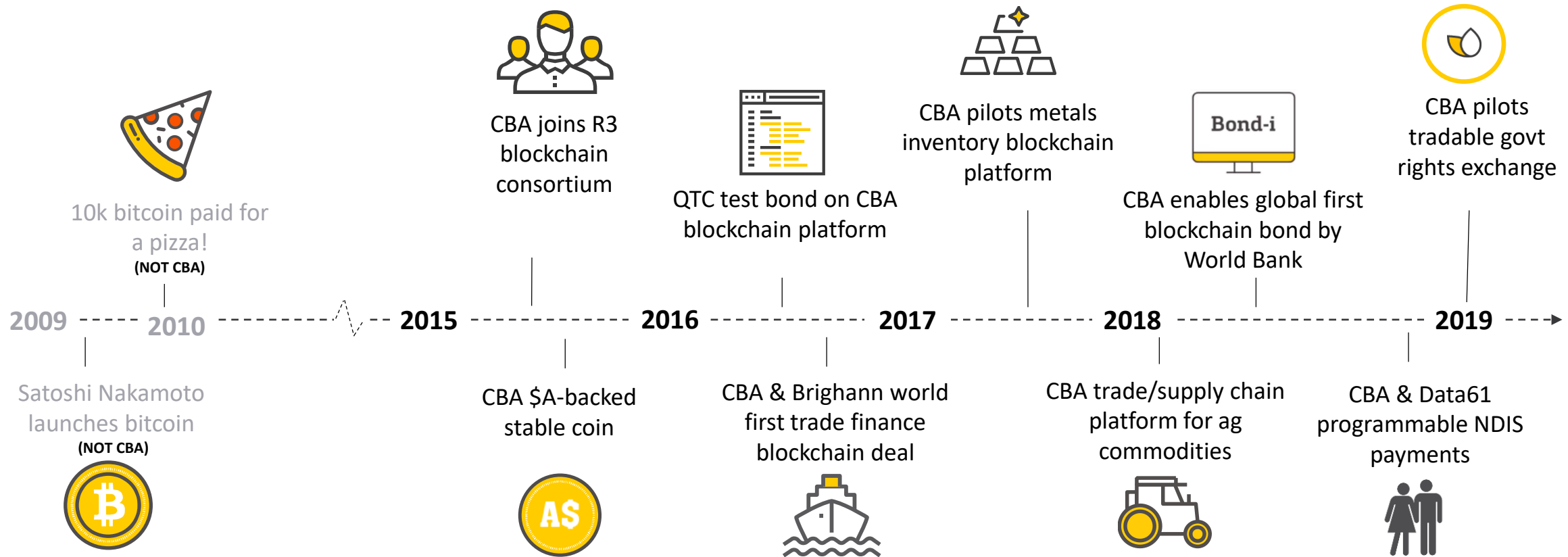
- Shared Database
- Updated by consensus
- Decentralized network
- P2P



- Shared set of facts
- Reduced time, cost, error
- Real-time, continuous audit

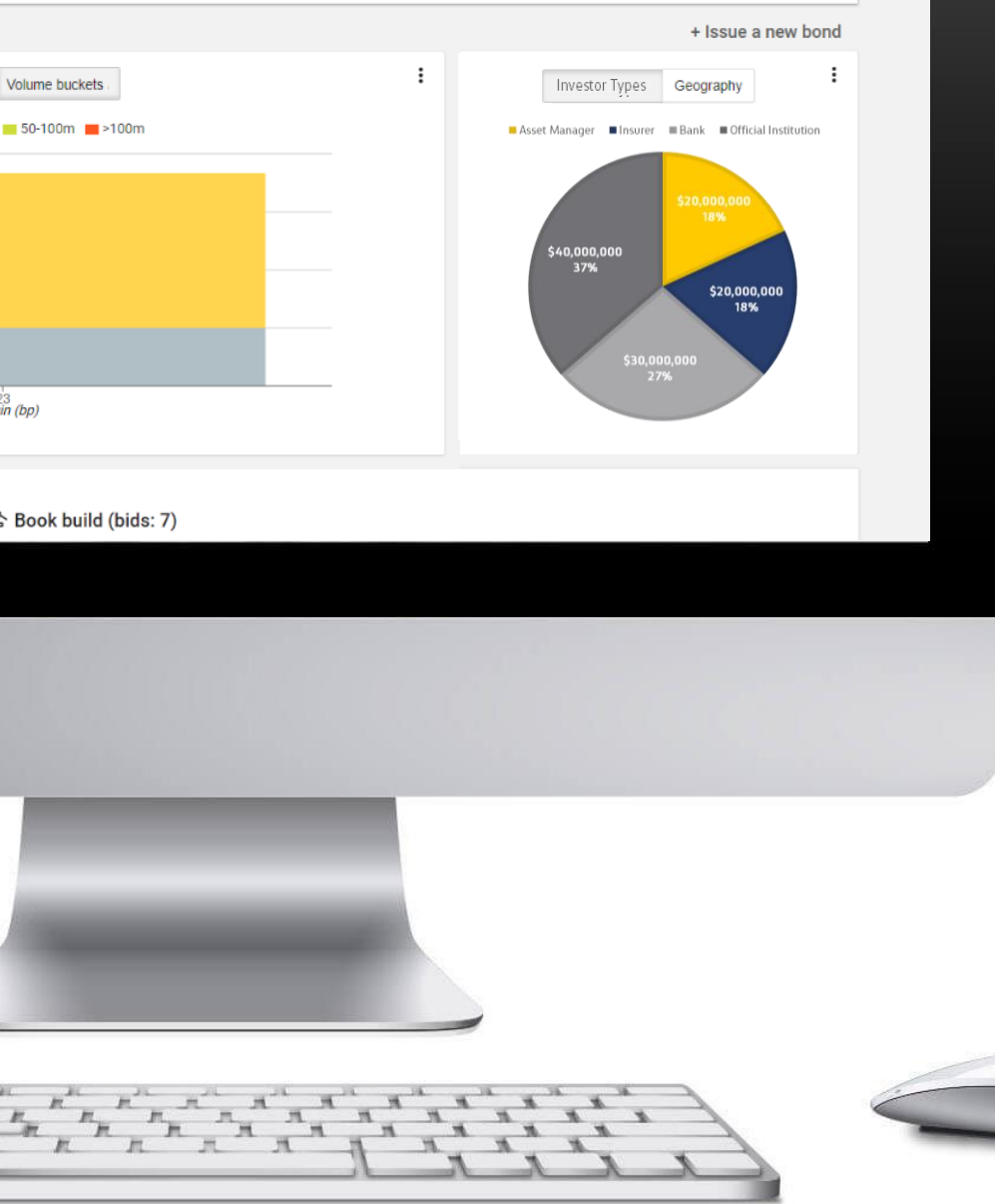


Brief history of Blockchain and CBA



The background is a composite image. At the top, a sunset sky with orange and yellow hues is visible. Below the sky, a world map is overlaid with a network of white dots and curved lines, representing global connectivity. The bottom half of the image shows a dense city skyline at dusk. A solid yellow vertical bar is positioned on the far left side. A black rectangular box with white text is centered over the city skyline.

Blockchain for Markets Orchestration



Project bond-*i*

World Bank A\$110m Blockchain Bond

Global first bond on blockchain

Distributed, permissioned network

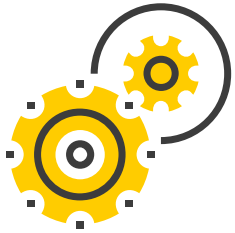
End-to-end management through bond life cycle

Collaborators

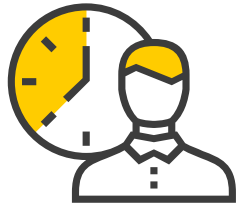


Benefits

Automation



Efficiency



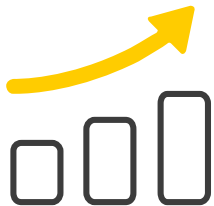
Transparency



Auditability



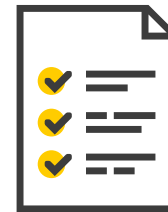
Productivity



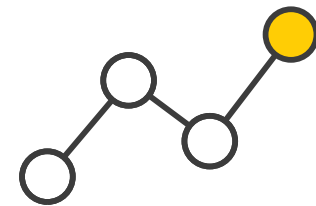
Reporting



Risk



New developments



Next Steps

Formation of consortium of strategic partners to expand platform into ecosystem



New Markets

Expand jurisdictions



New Product

Expand functionality, including cash on ledger



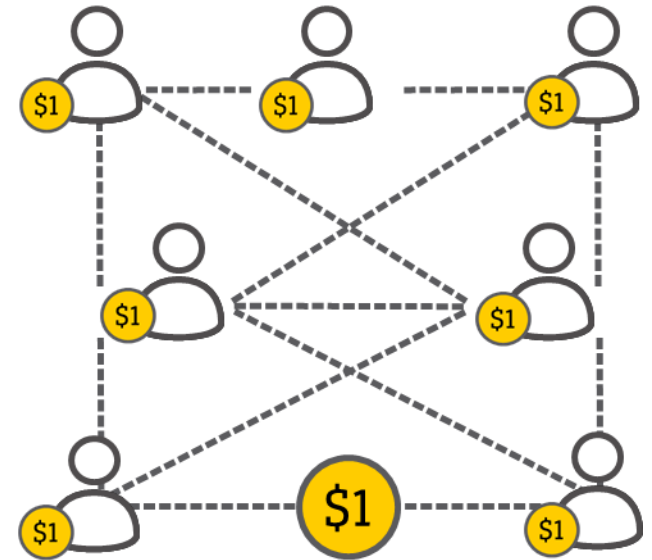
New Partners

Expand platform service providers

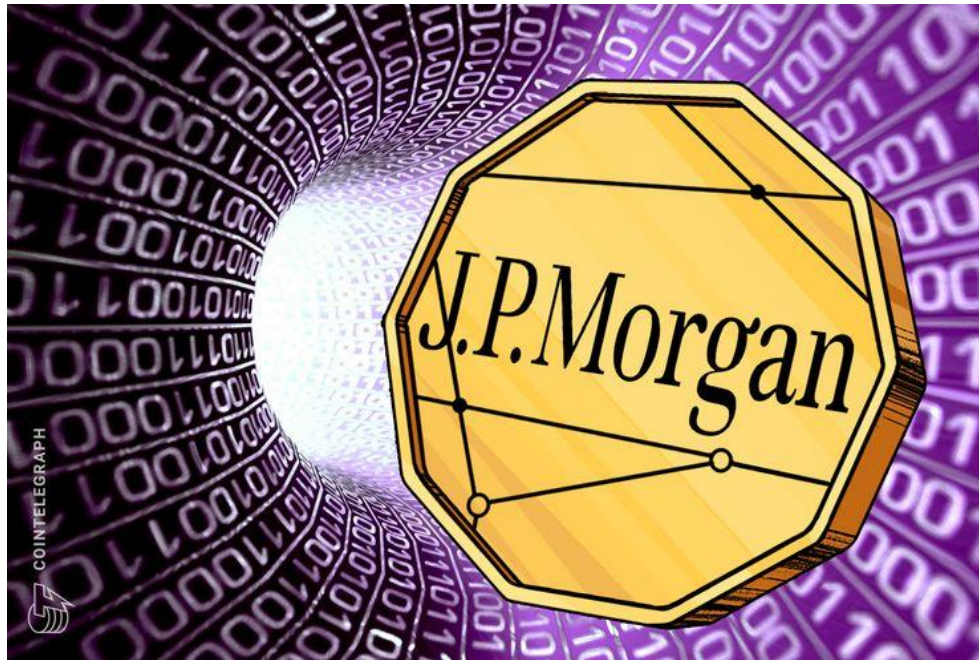


Blockchain for Programmable Payments

Value transfer using blockchain



Brave new payments world



YellowPay

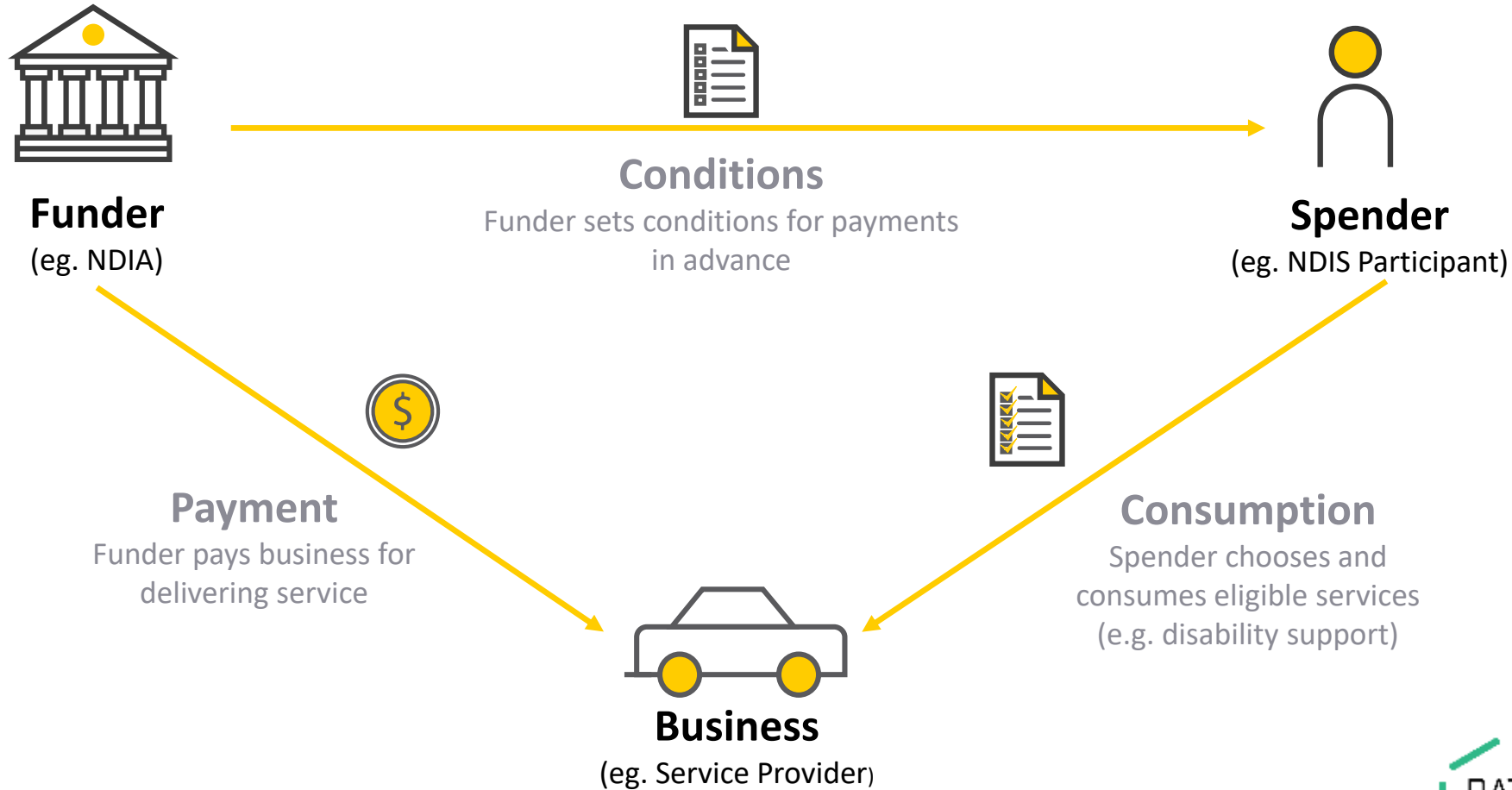
StableCoin

\$A-backed digital coin

- Payment + record
- Rich data set (SKU data)
- Inbuilt loyalty scheme
- System resilience



Making Money Smart



[play video](#)



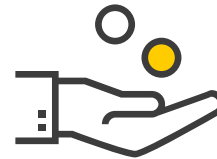
Focus Areas



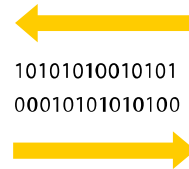
Low Volatility



Transferability



Broad acceptance



Programmability

A wide-angle landscape photograph showing a mountain valley. In the foreground, there are large, light-colored, weathered rock formations. Beyond the rocks, a dense green forest covers the valley floor and the slopes of the surrounding mountains. The mountains in the distance are layered, creating a sense of depth. The sky is filled with soft, grey clouds. On the left side of the image, there is a solid yellow vertical rectangle. Overlaid on the left side of the image, partially within the yellow rectangle, is the text "Blockchain for Biodiversity" in a white, bold, sans-serif font.

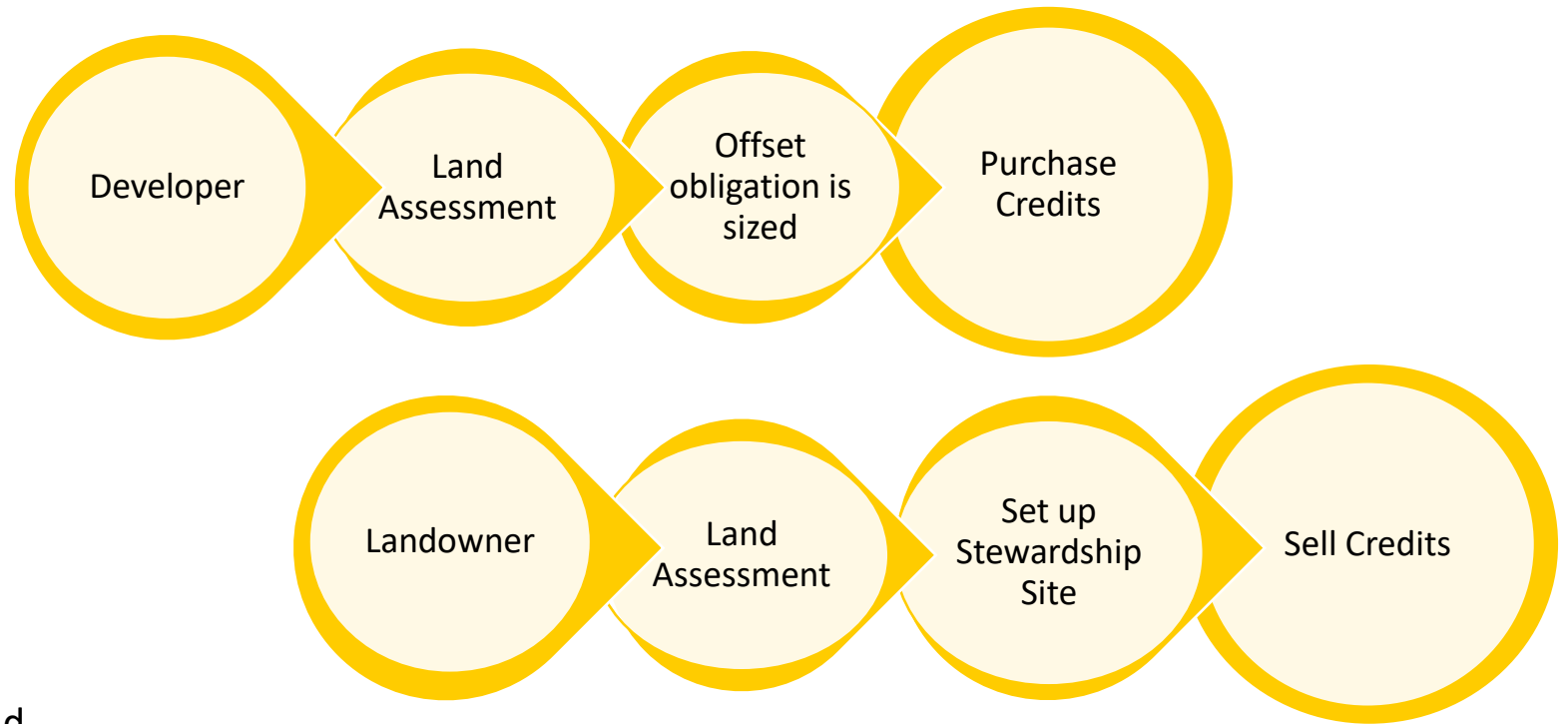
Blockchain for Biodiversity

NSW Biodiversity Offset Scheme

Aim: to maintain NSW flora and fauna and regulate development

'credit' = land managed to preserve biodiversity, offsetting development

Complication: there is no accessible marketplace to find prices, and buy and sell credits.





BioToken

NSW Biodiversity Credit Marketplace

Digital marketplace where digital tokens representing biodiversity credits can be created, bought, sold and retired by market participants.

Market rules can be embedded in tokens to ensure government's policy intent is efficiently realised.

Biodiversity = an investable asset.



Where to next?

Any valuable right, entitlement or asset can be tokenised

Asset Token = Value + Data + Rules

Asset-token marketplaces could deliver various benefits:

- Enhanced transparency
- Smart contracts – automate actions, reduce time & cost
- Collaboration using a single source of truth
- Greater flexibility (eg. fractional ownership)
- Intrinsic regulation – embed the rule book



Government Rights

Water, Fisheries etc.



Securities

Stocks and Bonds.



Property and Real Estate

Commercial and Residential



Challenges & Opportunities

Challenges to be overcome



Regulation



Interoperability



Collaboration



Technological



Opportunities



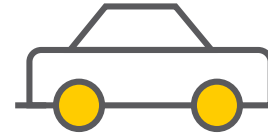
**Audit &
Reconciliation**



**Automation via
Smart Contracts**



Data sharing



**Asset
Management**



**Ethical
Citizenship**

WE BELIEVE THAT

INNOVATION

& CREATIVITY DRIVE HUMAN PROGRESS
THE IDEAS CAN CHANGE THE WORLD



THANK YOU