

Overview

I managed [Project Genesis \(Phase 1\)](#) at the BIS Innovation Hub Hong Kong Centre as project lead. Project Genesis developed two prototypes, one using the Stellar blockchain and another using the DAML framework, to introduce tokenised green bonds in small denominations, thereby giving greater access to retail investors. Such retail mobilisation may help give wider demand to a sustainable asset class with low risk characteristics as well as foster ownership and support of green projects.

The project also integrated real-time tracking, using IoT and DLT technology, as well as disclosure of green output for investors via mobile apps, thereby showcasing technologies that can be used to reduce greenwashing and increase transparency.

Three project reports with detailed information on Project Genesis as well as the two prototypes developed can be found on the [BIS project page](#). Further information on milestones reached, such as a showcasing Project Genesis in a live panel discussion during Hong Kong FinTech Week 2021 and a presentation at COP26, are provided further below.

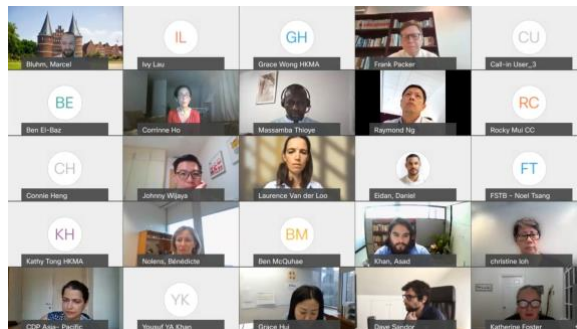
Team Genesis

Project Genesis was carried out in cooperation with the Hong Kong Monetary Authority and featured three key participants at the BISIH: Bénédicte Nolens (Head of BISIH Hong Kong Centre), Marcel Bluhm (Project Lead), Asad Khan (Tech Advisor).

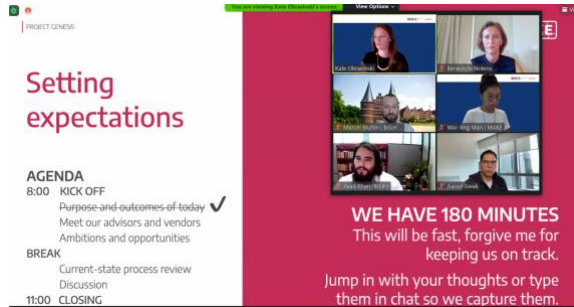


Milestones (Chronologically mirroring my LinkedIn posts)

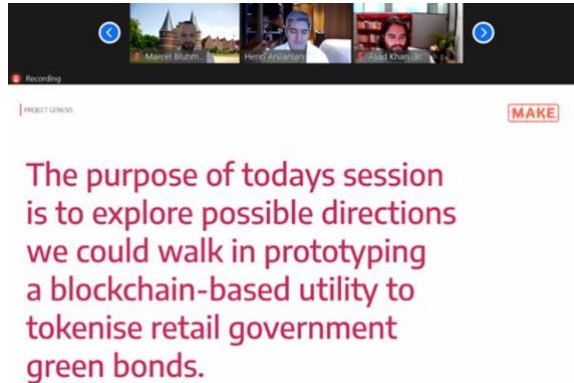
After 6 months of paving the path, Project Genesis started in earnest with the **Advisory Panel's kick-off meeting** on 17 June to discuss contents for the **visionary project report**.



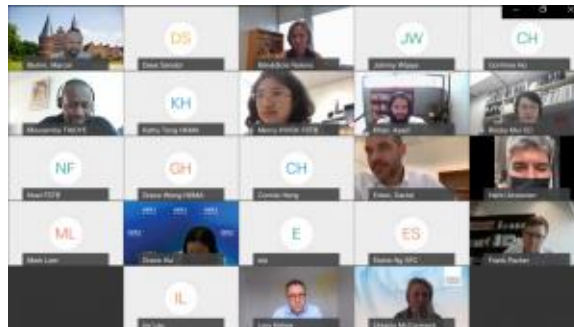
The Advisory Panel's **first prototype design session** to understand the current bond issuance process and its pain points took place on 24 June.



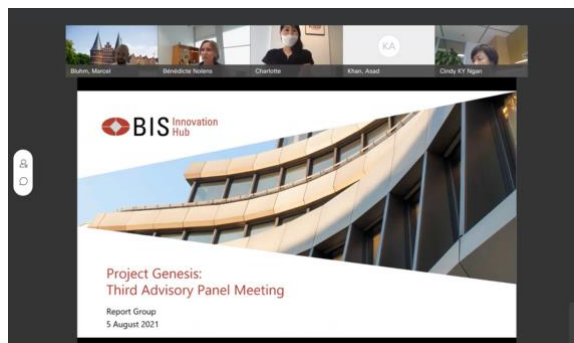
The Advisory Panel for Project Genesis met on 28 June for its **second prototype design session** to float and discuss ideas, which may help overcome pain points in the HKSAR's retail bond issuance process.



The second **Advisory Panel Report Meeting** for Project Genesis took place on 2 July. You will read about the topics agreed on in that meeting in a forthcoming visionary report.



The third **Advisory Panel Report Meeting** for Project Genesis took place on 5 August. Stay tuned for the visionary Genesis report forthcoming in October.



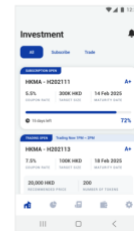
The BIS issued a [press release](#) on 24 August 2021 to announce Project Genesis.



The fourth **Advisory Panel Report Meeting** for Project Genesis took place on 2 September 2021 with a project midpoint discussion on prototype development.

Genesis Prototype Development

- Sprint 3 ends this week (Sprint integration approach)
- Key pain points currently addressed:
 - Off-chain payments leg
 - Secondary market trading (HKEX)
- Next steps: get online access to prototypes



The HKMA issued a [press release](#) on 3 November 2021 to announce Project Genesis at Hong Kong FinTech Week.



Upon delivery of **two prototypes** and **three project reports**, the BIS issued a second **press release** for Project Genesis on 4 November 2021.

The first prototype simulates the lifecycle of a typical bond on a permissioned distributed ledger platform, including origination, subscription, settlement and secondary trading. The prototype is able to considerably streamline these processes.

A second prototype with similar capability uses a public blockchain infrastructure. It also streamlines the investor onboarding and facilitates the direct payment and settlement between the issuer and investor.

In addition to developing two prototypes, Project Genesis delivered three BISIH reports.

The **first Genesis report** features a collection of articles by members of the Advisory Panel.

BIS Innovation Hub and Hong Kong Monetary Authority conclude first green finance project



Press release | 04 November 2021

- BIS and HKMA conclude a project to build prototype digital platforms that aim to enable green bond issuance with higher transparency and greater access to retail investors.
- Project Genesis allows retail investors to buy and sell tokenised green bonds and see the positive environmental impact that the financed projects achieve (in real time).
- The two prototypes show that technologies, including distributed ledger technology (DLT), can be used to streamline the green bond issuance process, while making it easier to track projects' positive environmental impact.

The Bank for International Settlements (BIS) Innovation Hub announced today the successful conclusion of **Project Genesis**, two prototype digital platforms that aim to enable investment in green bonds with higher transparency and greater access to retail investors.

The platforms combine blockchain, smart contracts, internet-of-things, and digital assets. They allow issuers and other stakeholders to explore innovative approaches to green bond distribution and transparency. Retail investors will be able to continuously track coupon payments and the positive environmental impact that the financed projects achieve in terms of reduced carbon dioxide emissions.



Project Genesis - Report 1
A vision for technology-driven green finance
November 2021



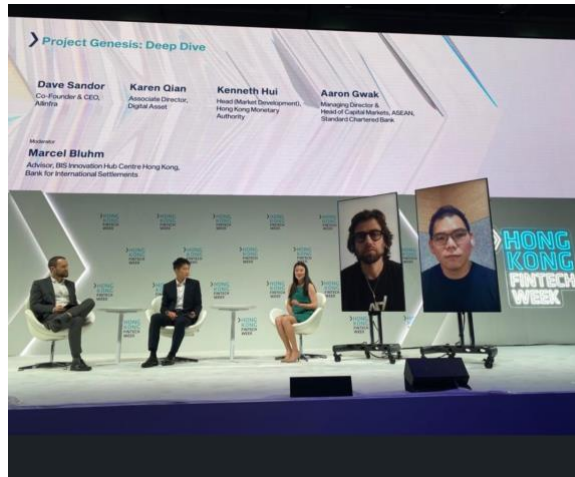
Project Genesis - Report 2
A prototype for green bond tokenisation by the Liberty Consortium
November 2021



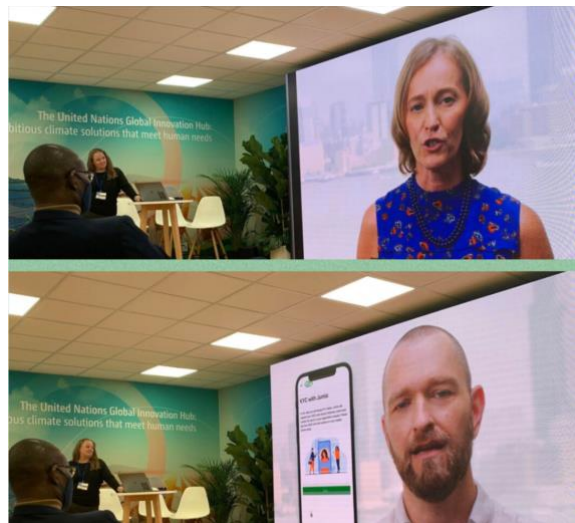
Project Genesis - Report 3
A prototype for green bond tokenisation by Digital Asset and GFT
November 2021

The [second Genesis report](#) and [third Genesis report](#) provide technical details on both prototypes built.

To showcase Project Genesis I moderated a [live panel](#) during Hong Kong FinTech Week.



Project Genesis was also showcased with a presentation at **COP26**.



Project Genesis was concluded with a **fifth Advisory Panel meeting** during which both prototypes were presented to all Genesis participants.

