CONSERVATION IMPACT SUMMARY GreenVault

GreenVault is an environmental entity that aims to help diminish the environmental devastation caused by gold mining. Gold has intrinsic value that has been appreciated by humanity since the dawn of civilization . When the government of the United States of America abandoned the gold standard, gold showed a momentary decline in popularity; however, in recent years demand for this metal has skyrocketed as investors and institutions seek stable assets to store their capital. Gold's utility as a store for value is undeniable[1]. This increase in demand is driving climate and public health disasters across the globe.

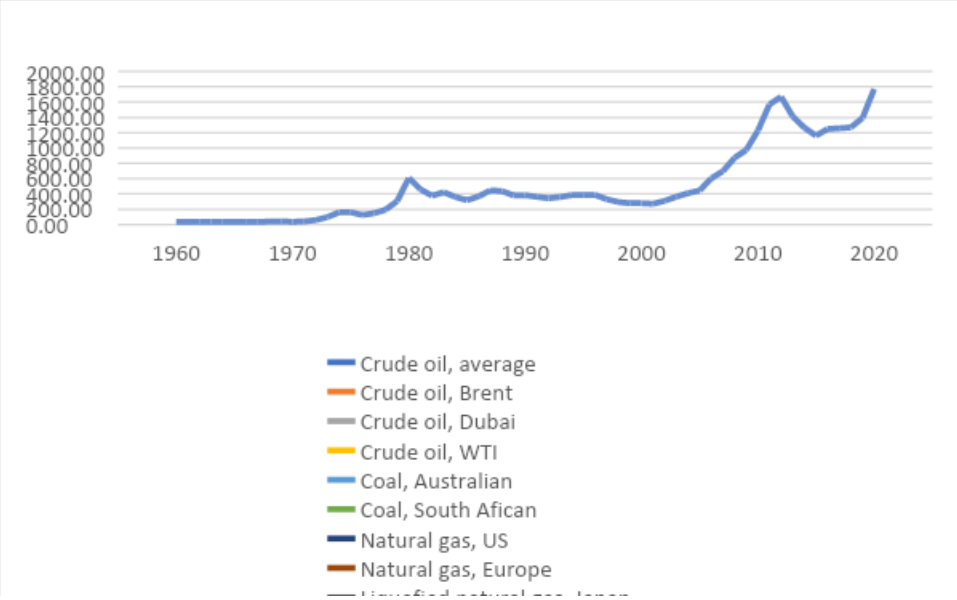


Fig 1. Historic gold prices. Source: https://www.worldbank.org/en/research/commodity-markets

Historically gold mining has been an extractive activity that has an immense environmental impact. Mining significantly modifies landscapes, destroys soil, pollutes water, releases carbon, generates dangerous particulate matter and produces hazardous waste[2]. **Extracting an ounce of placer gold requires 50,000 – 100,000 gallons of water** [3]. Annually 2,500 - 3,000 tons (roughly 88 - 105 million ounces) of gold are extracted worldwide[4].

[1] https://www.morganstanley.com/articles/investing-in-gold

[2] https://www.minam.gob.pe/calidadambiental/wp-content/uploads/sites/22/2017/02/2017-01-30-Manual-de-buenas-pr%C3%A1cticas-en-miner%C3%ADa-aur%C3%ADfera-aluvial-para-facilitar-una-adecuada-recuperacion-de-%C3%A1reas-FINAL-3.pdf

[3] https://pubs.usgs.gov/of/2012/1085/pdf/ofr2012-1085_v1-1.pdf

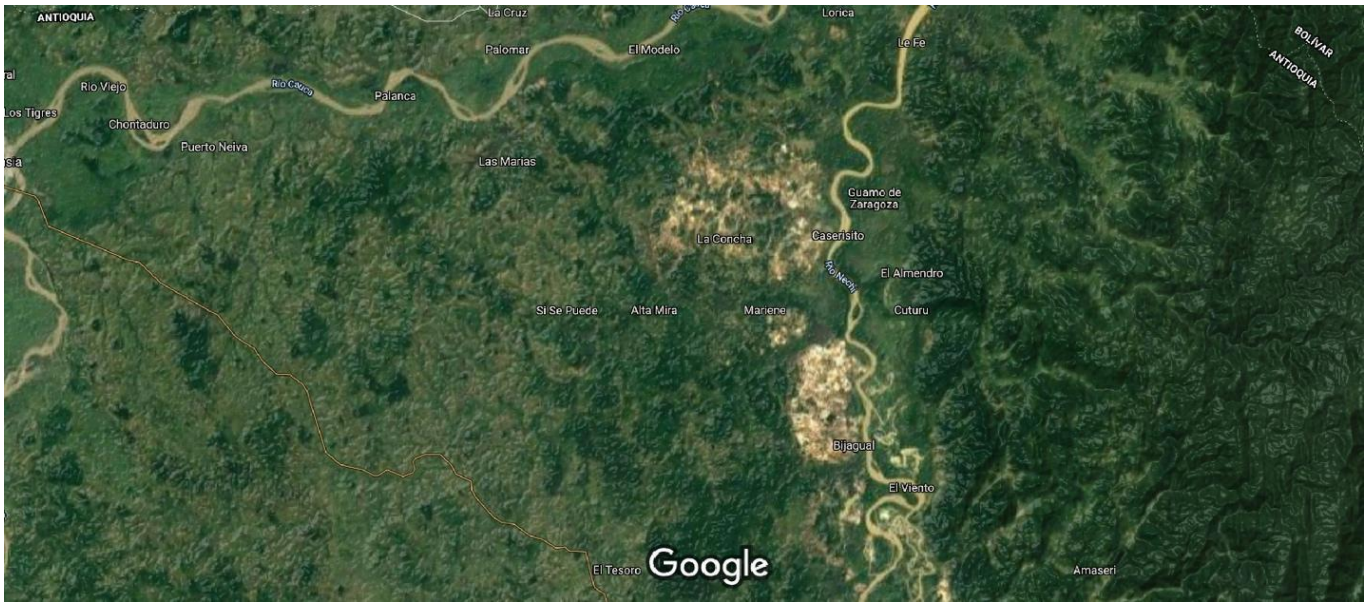
[4] https://www.gold.org/about-gold/gold-supply/gold-mining/how-much-gold

Alluvial, also known as placer gold deposits are derived from the weathering, erosion and transportation of gold from hard rock vein deposits by fluvial processes. The heavier gold remains while the lighter gangue minerals are transported away creating a concentration of gold. These types of deposits have historically produced over 60% of the world's gold and have been mined for over 7,000 years

Around 45% of the gold is vaulted in banks[5], institutions and privately; the remaingin 55% of the gold mined is used in industry and for jewelry. GreenVault can prevent the extraction of gold that would be vaulted rather than used for industry or jewelry products, through a revolutionary process that defines reserves of placer mining (alluvial mining[6]) and commits to their perpetual preservation on site. Thus, earth becomes the bank vault and we leave all ecosystem services, landscape, air, soil and wildlife intact, providing a safer and cleaner environment for future generations.

Graph 1. Actual impact of illegal placer mining in the municipality of Nechí, Colombia.

[5] https://www.gold.org/about-gold/gold-supply/gold-mining/how-much-gold
[6] https://www.usgs.gov/news/earthword-placer



Graph 2. Satellite perspective of placer mining between the municipalities of El Bagre, Nechí and Zaragoza, Antioquia, Colombia. Note the affected area is 62 x 41 kilometers. The clear brown areas are the ones affected by the illegal mining operations.

Mining also has strong social impacts. Communities around the world are affected by illegal mining in different ways, from forced migration[7,] to growing criminal economies that become places where sex trafficking, drugs and violence are common. Illegal gold mining also supplies armed groups with gold, which represents 60% of the money used for fueling conflict. In some countries in Latin America, illegal gold represents up to 80% of the gold that is exploited [8 9].

The more a country depends on mining, the slower its per capita growth is, this is called "the resource curse". Mining leads to many unwanted impacts such as forced relocation, physical attacks as well as loss of livelihoods to indigenous and rural communities. In many undeveloped countries due the general lack of legal title of their lands, even when they have been occupied during entire generations. There is also a gender bias in mining, where employment and royalties tend to go to men while women and kids suffer the consequences of social disruption and environmental harm.[10]

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[7] https://aida-americas.org/en/preserving-bolivia-s-high-andean-lakes-sources-of-life?gclid=Cj0KCQiAzMGNBhCyARIsANpUkzMqT1vpaPEjAghY4C1ehULmKsLk-wiy-vLw-U6mY49MmWExGWDOG7AaAkpjEALw_wcB

[8] https://insightcrime.org/news/analysis/gamechangers-2019-illegal-mining-criminal-economy/

[9] https://aida-americas.org/en/blog/understanding-the-true-costs-of-mining-in-latin-america

[10] https://earthworks.org/campaigns/no-dirty-gold/impacts/

Graph 3. Displaced communities living in extreme poverty in illegally mined areas in Colombia. PH Ana Castaño

By vaulting unmined placer gold, we will prevent detrimental effects of the extraction and stop water pollution, create an increase in farmland, allow animals to stay in their natural habitat, stop deforestation, eliminate disease and contaminants from the leftover stagnant pools of water, and reduce illegal mining used for money laundering and other nefarious activities.

GreenVault will incentivize a sustainable revolution in the mining industry by creating a system that monetizes on-site resources without costly extraction. **GreenVault will release a digital token backed by gold which is preserved in its natural deposit, properly measured and audited.** When people and institutions invest, they are enabling conservation efforts that will have a larger impact as the coin grows. By securing these areas, GreenVault will prevent carbon emissions, biodiversity loss and will preserve all ecosystem services such as supply, regulation, support and culture.

Conservationist and mining groups will be pleased to have this token in the market. This is a paradigm shift in the way we understand the value of assets. We will help the mining industry become more efficient and simultaneously more environmentally friendly by extracting only the gold that is actually needed for a physical purpose.

GreenVault has decades of experience in the mining industry worldwide. This has led us to release this electronic gold coin that will appreciate as reserves are added to our system. Imagine the environmental and economic impact of GreenVault holding and preserving millions of ounces of gold reserves while ecosystems are maintained, pristine water flows clean, soil is preserved, carbon is sequestered and wildlife flourishes.

GreenVault is under the umbrella of a concept created in 2008 by Mr. Paul Dias, a globally respected miner who developed a methodology to define the values of placer

gold contained in an area of land. Mr. Dias also came up with the idea of "Mining without mining" with the intention of preserving the resources on-site, and only exploiting them when really needed. His methodology has been used for financing mining projects[11], and driven by his desire to be responsible with conservation and future generations, he evolved the entire idea into GreenVault, a environmentally friendly company that will issue electronic tokens which derive their value from what humans have always believed in: Gold.

GreenVault has used a variety of drilling and sampling methodologies to define the alluvial "resource". Based on our experience, we have developed an industry accepted methodology for alluvial gold projects which allows us to create a "JORC" compliant resource and a bankable feasibility study.

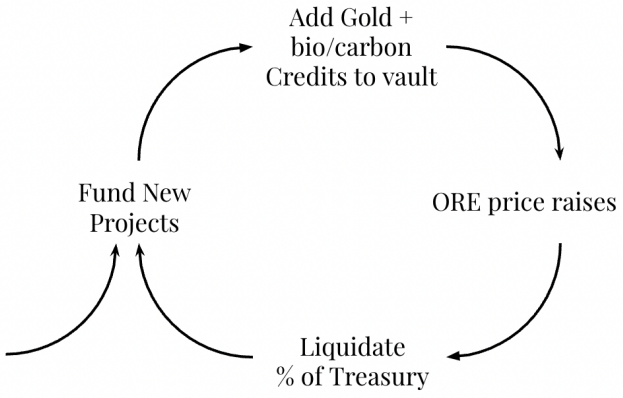
GreenVault believes that there is nothing more important than keeping the earth beautiful and healthy. We can create the most impenetrable, safe, secure protection for natural value. With our methodology we can secure, analyze and produce an accurate valuation of unmined gold reserves. Investors can see that the secured gold that GreenVault discovers is feasible for profit if ever extracted, and allow it to keep its value intact.

Following steps: present to key people in economy and conservation, find endorsement amongst conservation influencers in the US, Canada, Europe, Latin America, Australia and Asia. Market the token. Make it viral cause everyone we talk with believes this is revolutionary!!!

[11] https://raediasexplorations.com/

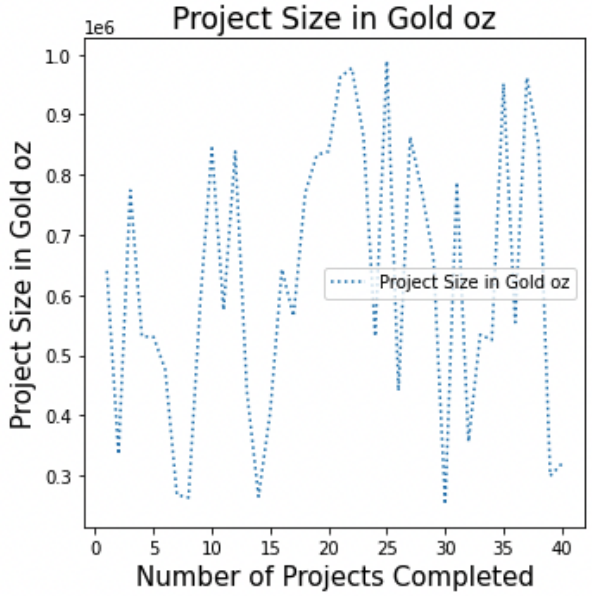
TOKENOMICS:

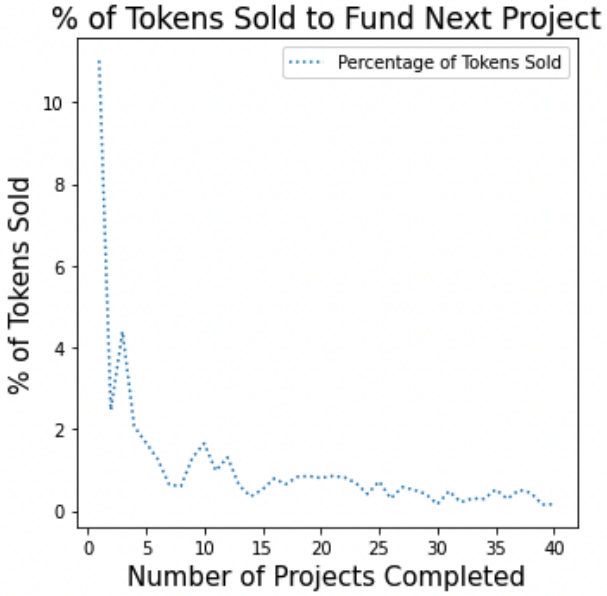
1) ORE Cap. 2 billion tokens.
2) Initial distribution: 50% treasury / 50% to early investors, partners, core team, and ICO
3) First year: Manhattan Gulch adds 1 million ounces into GreenVault
4) ICO funds new projects
5) ORE price raises
6) A small percent of the treasury is liquidated to fund another project.



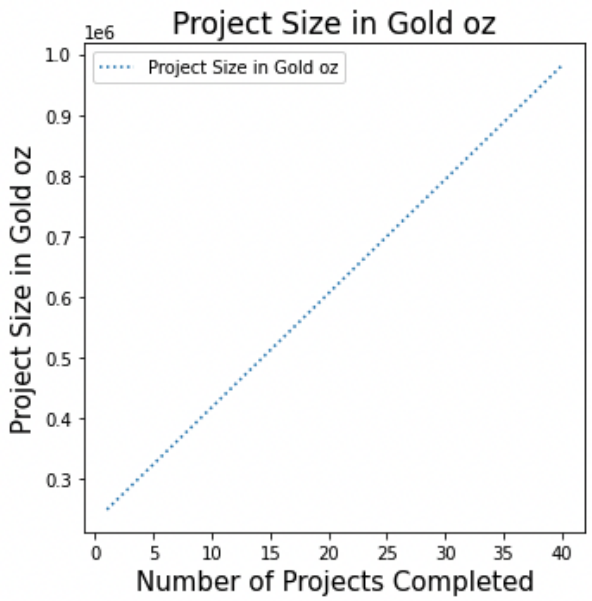
GreenVaults coin is called ORE, and there will be a fixed at 2 billion coins. Initially, the allocation will be split in half, 50% will go to the GreenVault's Decentralized Autonomous Organization (DAO) treasury and 50% will go to early investors, partners, and an ICO (initial coin offering) to the public. The treasury will be controlled by ORE coin holders and will be used to fund GreenVaults operations. The DAO treasury will eventually consist of ORE tokens, tokenized conservation rights, stable coins (USDC), as well as tokenized biodiversity and carbon credits.

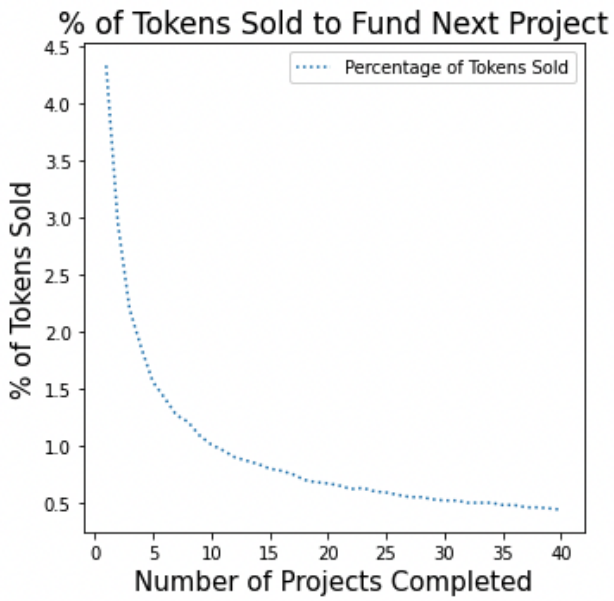
Over the course of the first year, Manhattan Gulch will be adding in 1 million ounces of gold conservation rights into the GreenVaults treasury. This will add security to the coin as early investors begin to rush into the project. Future projects will then be funded by liquidating ORE, bio-credits, and carbon-credits from the treasury. Modeling the percentage of ORE which needs to be liquidated in order to fund future projects we see that this number exponentially decreases after a few successful projects drive up the price of the ORE coin. This means the early holders will not face large dilution events. The graphs below show that even when randomly sampling project sizes (in millions of gold ounces) we consistently see a steep drop in how many ORE coins GreenVault needs to liquidate.



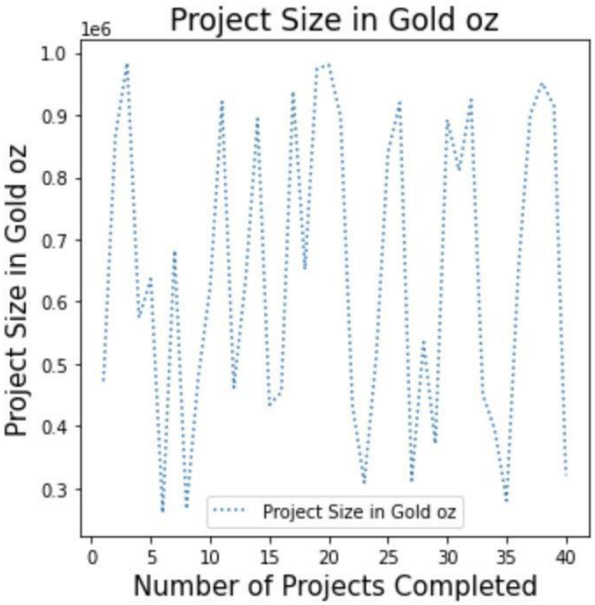


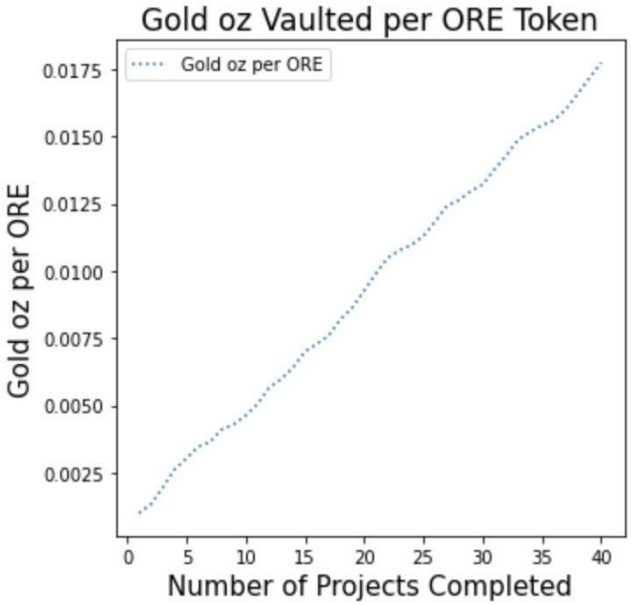
We can minimize the number of coins liquidated if we begin with smaller projects size and steadily increase as shown here below.





Furthermore, dilution in conserved ounces per ORE is non-existent and Ounces per ORE will increase steadily and in proportion to each new project as seen below.





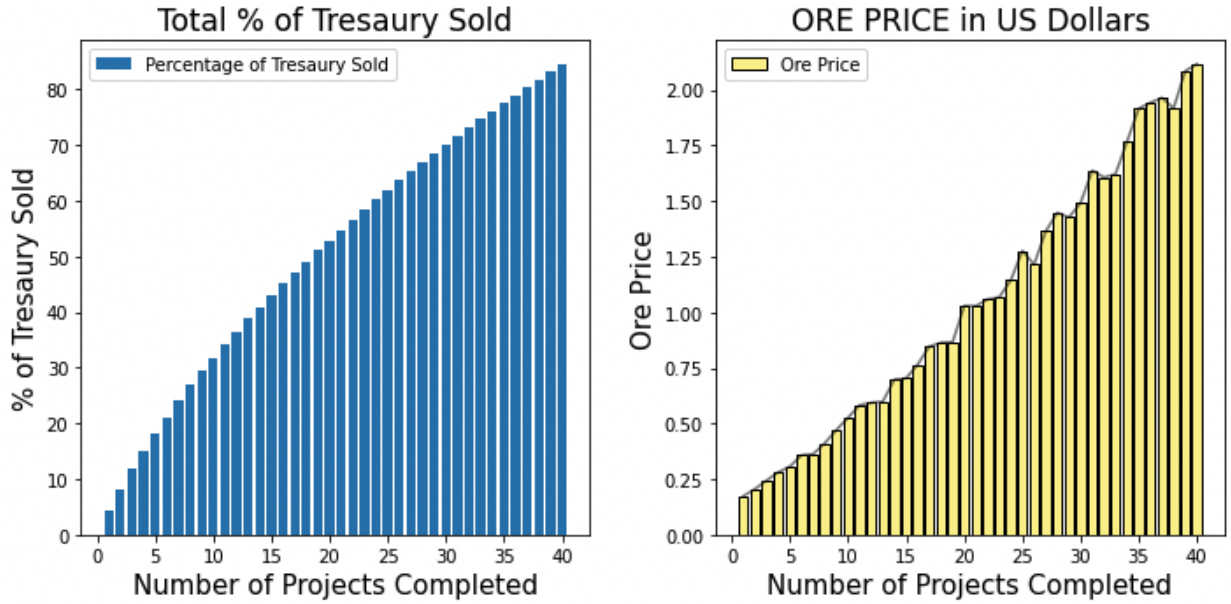
We will be operating with Raedias[12] a mining exploration company that developed the methodology that allows GreenVault to define gold deposits with precision at an industry leading acquisition and appraisal cost. These graphs consider an acquisition cost per

[12] https://raediasexplorations.com/

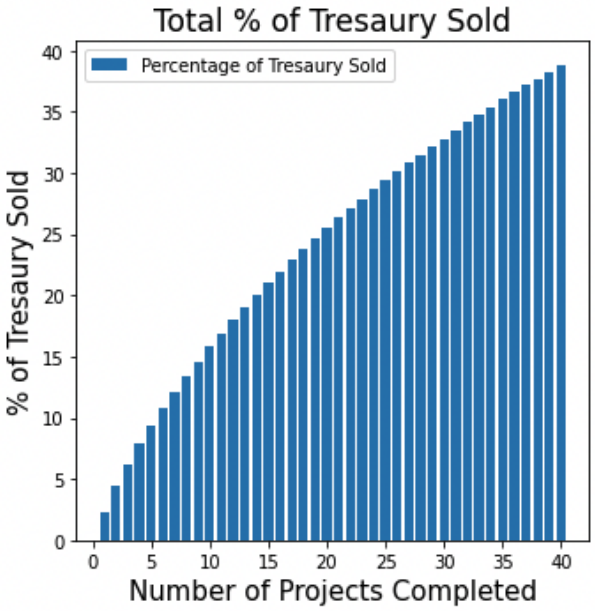
ounce of $30 which is very conservative. Currently, Raedias has an acquisition cost of $15 per ounce and the average acquisition cost would be $45 per ounce.

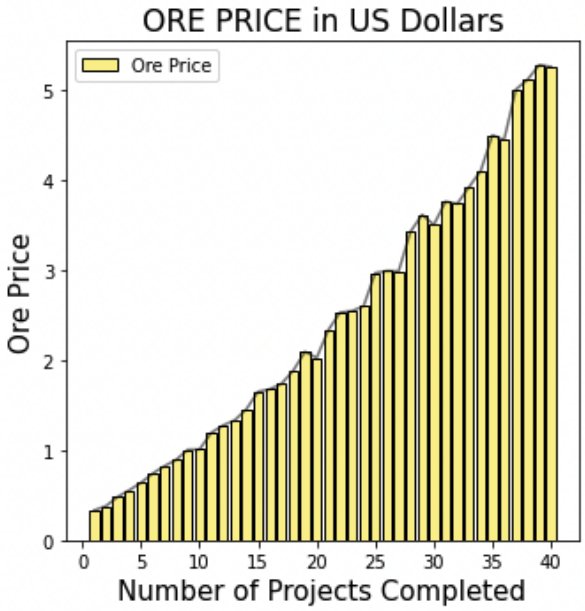
Professor of Finance at University of Western Australia, Dirk Baur and his co-authors have completed a meta-analysis of 75 exploration companies. Using this data they have estimated the value of gold in the ground is 8-15% that of mined gold. At $1800 an ounce conserved gold should be worth $144 - $270 per ounce. Without any bio-credits or carbon-credits we could see price movement demonstrated in the graph below.

Worst Case Scenario – 8% value of mined gold + no biodiversity or carbon credits:



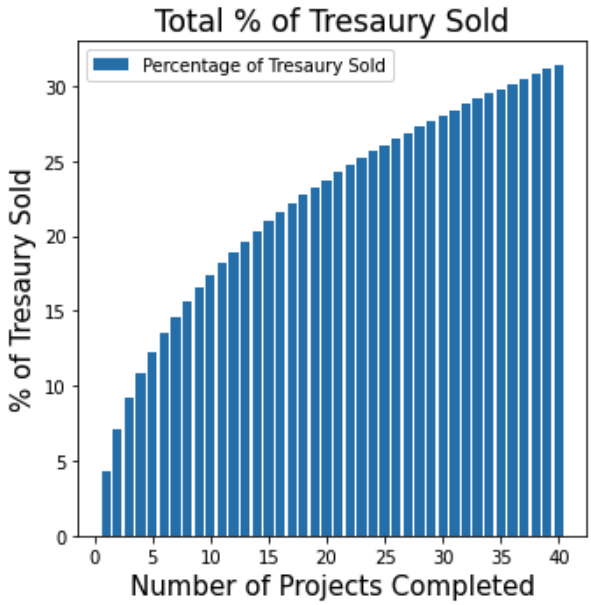
Middle Tier Scenario – 15% value of mined gold + no biodiversity or carbon credits:

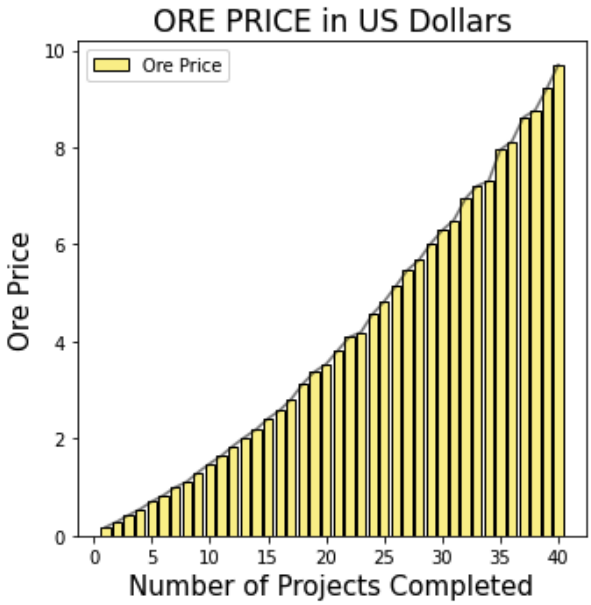




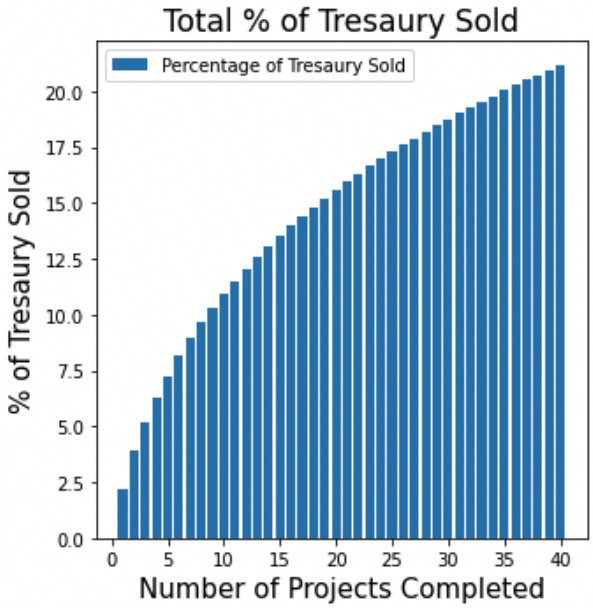
If we include the value of potential bio-credits valued a $6000 per credit and carbon-credits valued at $5 per credit we see the following price movements below.

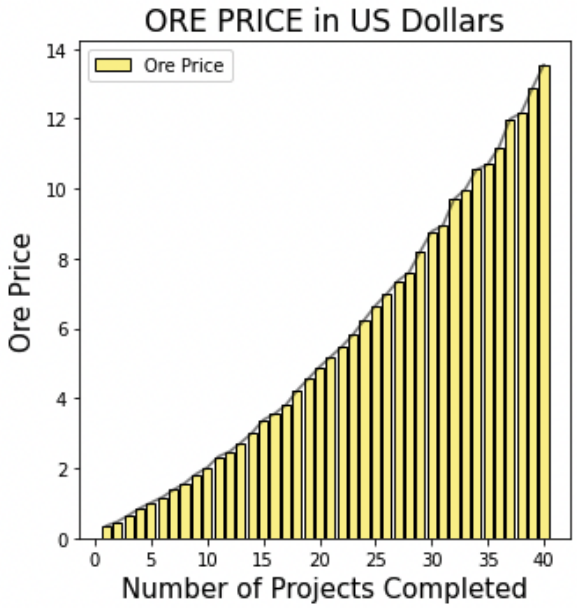
Low Gold Price (8% of mined gold) with Bio/Carbon Credits:





High Gold Price (15% of mined gold) with Bio/Carbon Credits:





As ORE price grows GreenVault will sell smaller and smaller percentages of ORE from the treasury and in some cases replace ORE liquidations with bio and carbon credit liquidations. This will fund growth which will in turn lead to a raise in ORE price. Creating a cycle where, as ORE price grows, the GreenVault can afford to buy and verify more reserves which will lead to more gold entering GreenVault and theoretically the influx of controlled verified value will lead to growth in ORE price closing the feedback loop.

Once this flywheel spins up, there will no stopping the incentive model the Green Vault DAO has created. Our limiting factor will be how quickly we can effectively deploy capital for verification and accumulation of reserves.