# **Evolving Carbon Credit Markets Priming Pipeline with New Ways to Play**

## **Carbon Market Interest and Investor Participation Options are Evolving Rapidly**

ESG continues to engrain itself as a central pillar, both as an investment criterion and as a corporate stewardship priority. Carbon neutrality is a goal which touches all three components of 'ESG'. 'Environment' is the obvious direct connection, as reducing, eliminating, or offsetting a carbon footprint leads to reduced emission of greenhouse gasses (GHG) and thus an improved outlook for the global environmental crisis. Strong 'Governance' prioritizes a 'Social' duty to act in a way that improves the sustainability of earth and its occupants. The Carbon markets exist to incentivize and facilitate the reduction of GHG emission (or CO<sub>2</sub> equivalent) surpluses from all sources spanning industry, corporate, public, private and personal.

The carbon markets can be broken down into two key types: the "Compliance Market", which is regulated, with mandated participation for entities subject to it, and the "Voluntary Market", which is exactly what is sounds like, i.e. a place where virtually any entity can acquire and retire carbon credits to offset a carbon footprint. Many new investment opportunities and integrated business models focus on the Voluntary Market, where there are opportunities to develop new projects capable of generating verifiable carbon credits which can in-turn be sold, creating cash flow streams for the owner/developers.

In this report our aim is to provide a high-level overview of the carbon credit markets and highlight emerging opportunities in the carbon space that are on our radar and readily accessible, or plan to be, to investors as public companies. We provide a more detailed description of each of the nine companies highlighted in the table below later in this report, but as an introduction, each is involved in some way in identifying, financing, advancing or developing projects that will derive cash flow from the generation of carbon credits, by sale, intermediation, royalty or streaming arrangements. Many are leveraging partnerships or alliances or with key industry players not only to identify, assess and gain access to these projects, but also to facilitate unique offerings or positioning in the space. As competition appears to be rapidly increasing to finance carbon credit generating project development, leveraging the expertise of experienced market participants is crucial to identifying the best opportunities. As we describe in our discussion of the Voluntary Market, not all carbon credits are created equal, and thus trade at a range of prices based on their individual underlying characteristics such as source or type of underlying project (e.g. 'nature-based'). There are a few ways to gauge price and directional movement of carbon credits in the Voluntary Market. For example, the CME Group's Nature-Based Global Emissions Offset (N-GEO) futures contract price and forward curve (Figure 10) provides a good snapshot of the market for 'nature-based' CO2 emissions offset pricing, although historical data is limited on this product, having launched this past summer. The rolling active contract price has increased 140% in just the first 6 months of trading, while similarly rapid gains in the Compliance Market are also occurring, suggesting robust demand for emissions offsets and hedging. The forward curve for the Voluntary Market N-GEO contract is in contango (Figure 10) with December 2025 contracts pricing credits at a 23% premium to spot, indicating a modest 5.2% CAGR in price-terms, but as we show for both the Voluntary and Compliance Markets, the forward curve contango has historically significantly underestimated price movement and many industry followers are calling for strong demand growth which could support higher prices.

Figure 1: Haywood Focus List of New and Emerging Carbon Credit / Emissions Plays - See Page 14 for Details Discussion of each

		Consensus Targets					NAV Comps		Cash Flow Comps		
		S&P CapitalIQ		Shares	Market	Enterprise	IBES		(	CFPS (LoC	)
Company (Ticker) - Haywood does not	Share	Consensus	Implied	Outst.	Capitalization	Value (CAD)	Consensus	Price /			
currently cover or rate any of the below	Price	Target	Return	(millions)	(millions)	(millions)	NAV	Nav	2019	2020	2021
Altius Renewable (ARR-T)	\$9.46	\$13.50	43%	27	\$251	\$142	\$10.29	0.92x		(\$0.08)	(\$0.05)
Base Carbon (private, RTO complete)											
Carbon Neutral (Private)											
Carbon Streaming (NETZ-NEO)	\$12.66	\$22.37	77%	47	\$591	\$452					
Global Carbon (Private)											
Invert (Private)											
Osisko Green (GOGR-T)	\$9.54			33	\$315	\$312					
Star Royalties (STRR-V)	\$0.58			73	\$42	\$37					
Vida Carbon (Private)											
Group Average								0.92x			

Bloomberg, S&P CapitalIQ, Company Reports and Presentations, Haywood Securities

# Scaling the Voluntary Market is Essential to Realizing Climate Goals

# Increasing Net-Zero Priorities Represent Paradigm Shift in Demand for the Carbon Market

Industry experts\* suggest that global demand for carbon credits may increase by 15 times current demand by 2030 (1.5-2.0 GtCO<sub>2</sub>e, potentially worth more than US\$50 billion, depending on your price assumption), increasing exponentially by 100 times by 2050, to 7-13 GtCO<sub>2</sub>e (Figure 2) (\*Taskforce for Scaling Voluntary Carbon Markets, TSVCM). It is widely recognized the Paris Agreement (2015) goal of limiting the increase in global average temperatures to <2°C above preindustrial levels will require a massive decrease in GHG emissions globally. A higher bar of limiting global temperature change to +1.5°C was set as ideal. That Agreement outlined a 50% reduction in GHG output by 2030 with a goal of net-zero by 2050.

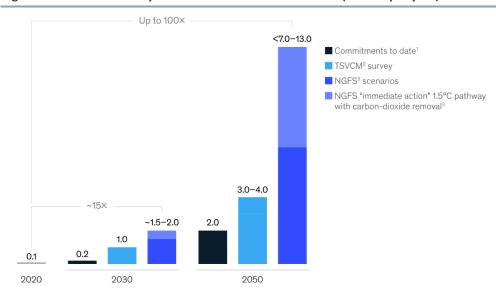


Figure 2: TSVCM Voluntary Carbon Credit Demand Scenarios (GtCO₂e per year)

Source: McKinsey.com

With nearly 191 countries plus the European Union, signing the Paris agreement, and just 21.5% of global emissions currently addressed by Compliance Markets (Figure 6, p6), the need to scale Voluntary Markets rapidly is clear. Industry commentary from McKinsey suggests that "net-zero" pledges from global companies have doubled from 500 in 2019 to more than 1,000 in 2020, citing 3<sup>rd</sup> party research. We expect that trend to remain robust as most of the world continues to recognize ESG priorities and prioritize reduction of emissions. This is a multi-pronged thrust from Governments, NGOs, corporates, investors and individuals. Some major investment funds have mandates to divest of companies that do not achieve certain emissions goals in coming years, placing further incentive on industry and peer funds to adopt similar principles.



These amounts reflect demand established by climate commitments of more than 700 large companies. They are lower bounds because they do not account for likely growth in commitments and do not represent all companies worldwide.

TSVCM = Taskforce on Scaling Voluntary Carbon Markets. These amounts reflect demand based on a survey of subject-matter experts in the TSVCM.

NGFS = Network for Greening the Financial System. These amounts reflect demand based on carbon-dioxide removal and sequestration requirements under

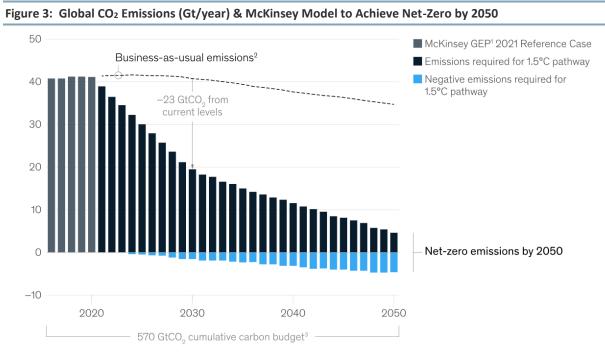
<sup>&</sup>quot;NGFS = Network for Greening the Financial System. These amounts reflect defining dased on a survey of subject-inflater skyles in the 15xXXXIII.

"NGFS = Network for Greening the Financial System. These amounts reflect demand based on carbon-dioxide removal and sequestration requirements under the NGFS's 1.5°C and 2.0°C scenarios. Both amounts reflect an assumption that all carbon-dioxide removal and sequestration results from carbon credits purchased on the voluntary market (whereas some removal and sequestration will result from carbon credits purchased in compliance markets and some will result from efforts other than carbon-offsetting projects).

Source: NGFS; TSVCM; McKinsey analysis

### **Increasing Net-Zero Priorities Represent Paradigm Shift for the Carbon Market**

Existing technologies or mechanisms to actively and directly reduce emissions 'at source' for industry are characterized as "prohibitively expensive", or outright impossible with current technology. Enter the Carbon Markets. The concept of "negative emissions" is enabled by physical removal of GHGs from the atmosphere. In Figure 3 the McKinsey model for achieving net-zero GHG emissions globally by 2050 shows the estimated GHG emissions level (black) and negative emissions required (blue) to offset that emissions base in 2050. Carbon markets provide the opportunity for emitters (and anyone) to purchase credits to offset their footprint. The price of carbon credits provides the incentive to develop projects that generate the credits. Some types of projects 'remove' CO<sub>2</sub> from the atmosphere, going on reduction or prevention of emissions.



<sup>&</sup>lt;sup>1</sup>Global Energy Perspective.

Source: McKinsey.com

Risks to supply of carbon credits required to meet 2030 McKinsey forecasts are real and despite the clear potential for supply to meet demand with investment in new project development. McKinsey is estimating 'potential' annual supply of carbon credits in the Voluntary Market by 2030 at 8-12 GtCO<sub>2</sub> of annual capacity, in all forms (prevention, nature-based sequestration, i.e. reforestation, afforestation, avoidance or reduction of emissions and technology-based/mechanical removal of CO<sub>2</sub>).

The caveat is that "... the development of projects would have to ramp up at an unprecedented rate." Enter our focus list. Companies like the ones we highlight in this report are positioning to be a part enabling that ramp up. That ramp up will require carbon credit prices reflect attractive project IRRs to developers. Add to this the very real risk that development of all potential projects identified to meet forecast demand are not developed and the associated heightened competition to purchase offset credits, and this paints a very bullish picture for carbon credit pricing going forward. We expect this potential shortfall to be validated by increasing activity in the emerging derivatives markets where these risks can be hedged.



While emissions fell by a quarter at the peak of COVID-19-related lockdowns, daily emissions have rebounded to be only 5% lower than 2019 levels. Scenarios to 2050 remain the same. Forster et al., "Current and future global climate impacts resulting from COVID-19," *Nature Climate Change*, August 7, 2020, nature.com.

Budget of 570 GtCo<sub>2</sub> emissions from 2018 onward offers a 66% chance of limiting global warming to 1.5°C, when assessing historical temperature increases from a blend of air and sea-surface temperatures.

Source: Corinne Le Quéré et al., "Global Carbon Budget 2018," Earth Systems Science Data, 2018, Volume 10, Number 4, pp. 2141–94, doi.org; IPCC; McKinsey Global Energy Perspective 2021; McKinsey analysis

### **Increasing Net-Zero Priorities Represent Paradigm Shift for the Carbon Market**

McKinsey's risked model of supply (Figure 4) shows a very different 2030 annual carbon credit generating capacity which describes a range of 1-5 GtCO<sub>2</sub> of annual capacity by 2030, significantly lower than reflected in the "potential" model of 8-12 GtCO<sub>2</sub> of annual capacity, but still meeting the needs under a scenario where demand undergoes the 15x expansion by 2030 discussed earlier (to 1.5-2.0 GtCO<sub>2</sub>e). In any scenario, significant investment is required to enable the availability of carbon offsets to meet global emissions targets. We see the risks to new supply as a major catalyst for carbon prices in the voluntary market going forward, supporting a robust market for those investing in and providing capital new projects, or otherwise facilitating participation the Voluntary Markets, like the focus names we highlight in this report.

Technology-based removal

Additional emissions avoidance/reduction

Nature-based sequestration

Avoided nature loss

Potential supply after accounting for mobilization challenges

Figure 4: McKinsey Model of Potential Carbon Credit Supply by 2030 vs Risked Supply

Source: McKinsey.com

## Overview of Carbon / Emissions Markets – Compliance Market

The Compliance Market is most often a cap-and-trade based structure that is thought to have advantages over competing regulated models such as imposing a 'carbon tax', specifically because of the "cap" mechanism. Under a cap-and-trade structure, the total amount of CO<sub>2</sub>-equivalent emissions allowed within the compliance region is capped. Individual operators will be assigned and/or will purchase at auction, the needed carbon credits to offset its expected emissions for the period to achieve compliance. Those exceeding their cap must purchase additional credits, generally on an Emissions Trading Scheme (ETS) like the European Union's ETS, from those holding excess credits. Mandatory compliance with the structure means that carbon credits prices in the Compliance Market are generally more expensive than those of the Voluntary Market. Compliance markets often have a reducing cap structure. That means that the total number of available CO<sub>2</sub> equivalent emissions credits to offset a carbon footprint are on a reducing schedule working toward some future goal of lowering total GHG emissions. This functionally increases the cost of carbon emissions as intended, becoming an increasingly important component of operational economic decisions thereby forcing further prioritization of carbon emissions reductions for constituents.

The increasing cost of supporting a carbon footprint is intended to affect behavioral change wherever it is felt. We expect these costs will eventually touch the earth's population in its entirety, creating a strong long-term fundamental case for higher carbon prices due to expected relative scarcity of nature-based sources of carbon credits compared to global GHG emissions.



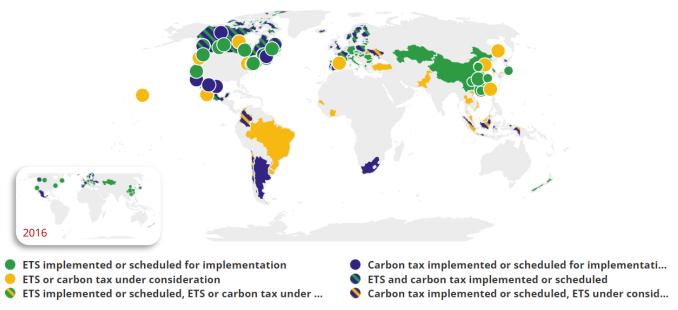
Estimates of the potential supply from each category were developed using conservative methodologies. The upper end of the range for "practical" potential supply (12 GtCO<sub>2</sub> per year) slightly exceeds the total of the estimated supplies from each category to reflect the possibility that supply will be greater than estimated.

<sup>&</sup>lt;sup>2</sup>Key mobilization challenges include the rate and complexity of scaling up carbon-offsetting efforts, the geographic concentration of carbon-offsetting opportunities, risks to the carbon market, and the difficulty of attracting financing. Source: Taskforce on Scaling Voluntary Carbon Markets; McKinsey analysis

More expensive mechanical based CO<sub>2</sub> capture solutions may eventually represent the next marginal cost of generating a carbon credit as demand soaks up other sources of carbon offsets. Mechanical based technologies for Direct Air Capture of CO<sub>2</sub> require various amounts of heat and electricity. There are various studies suggesting a fairly wide range of costs, but the U.S. IEA suggests a range of US\$134-\$342/tonne CO<sub>2</sub>, placing it well above current pricing for most ETSs in the Compliance Market and an even higher gap to the average price in the Voluntary Markets.

The World Bank Carbon Pricing Dashboard is a good resource for tracking the global adoption of carbon compliance schemes. It indicates that as of 2021 globally, there were 65 "carbon pricing initiatives" already implemented, with 45 of these occurring at the national level, covering 21.5% of global GHG emissions or 11.65 billion tonnes of CO<sub>2</sub> equivalent (CO<sub>2</sub>e). The map in Figure 5, although geographic, rather than emissions intensity-based, does provide some visual clue as to how much of the world's emissions (>78%) are not yet covered by some form of carbon pricing initiative. The acceleration in the trend towards formalization is evident when observing the 2016 map inset in the same figure indicating a massive increase in the footprint of carbon initiatives in just the last 5-years. It should be noted that China, which formally implemented its initiative in 2021, represents the biggest step change in global emissions covered by a scheme or tax, representing 7.4% of the 21.5% of global GHG emissions covered (Figure 6), leaping from just under 15% in 2020.

Figure 5: 2021 Map of Regional, National and Subnational Carbon Pricing Initiatives (2016 inset)



Source: worldbank.org



Digging into that data a bit shows a preference for Exchange Trading Schemes in the larger compliance markets. ETSs make up 31 of the 65 'Carbon Price Initiatives' globally but account for 76% of the GHG emissions covered by those initiatives. The exception would be Japan with its carbon tax structure making up 8.5% the GHG emissions covered by those initiatives (1.8% of global GHG emissions).

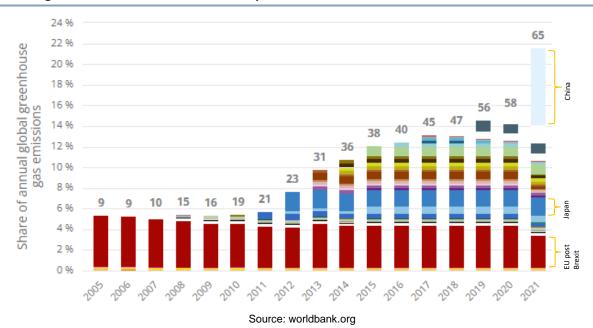


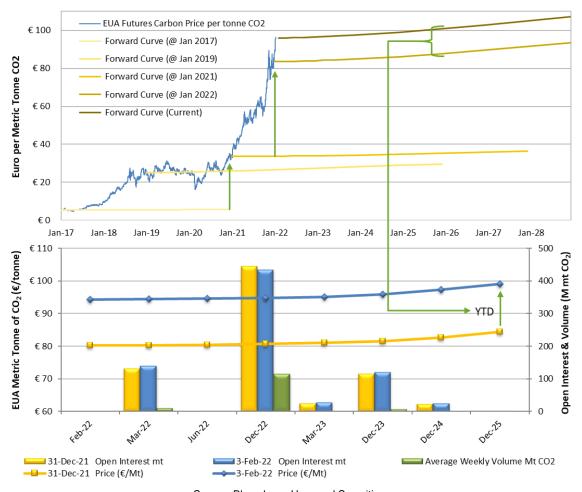
Figure 6: Percentage of Global GHG Emissions covered by ETS or Carbon Tax Schemes

The European Union Emissions Trading Scheme (EU ETS) has a well-developed scheme for allocation and auctioning of emissions allowances, and the ICE Index offers an EUA Futures contract series enabling price hedging and futures curve visibility. Prices have been rising rapidly within the compliance market since late 2020 (Figure 7), as various compliance markets continue to define the mechanisms by which they will achieve climate goals. For example, in July of 2021, legislative proposals from the European Commission outlined a paradigm for reducing GHG emissions 55% (net) by 2030, with an ultimate of achieving "climate neutrality" for the EU by 2050. "Climate neutrality" under the EU plan is simply "an economy with net-zero greenhouse gas emissions." More clarity on achieving climate goals through the lowering of net CO<sub>2</sub> equivalent emissions seems to have a strong correlation with price movement in the associate futures market. As show below, the historic futures curves at various points in time, and currently, were, or are, only mildly in contango, and as the green arrows in Figure 7 show, actual pricing greatly exceeded the expectations of the forward curves. The futures are relatively lightly traded with some contract dates lacking any open interest. YTD in 2022, spot price has already moved through the December 2028 contract price indicated by the futures curve as we started the year just 1 month ago. The forward curve again shifts upward, but without a material increase in the slope, or degree of contango.

Several other Compliance Markets have a secondary market which provides futures contract pricing visibility, including the UK Emissions allowance that replaces the UK's component of the EU Share in Figure 6 above. The ICE Carbon Futures Index Family is comprised of the "four most actively traded carbon markets in the world", including the EU ETS, which commenced in 2005, the California Cap and Trade Program, which began in 2013, the Regional Greenhouse Gas Initiative (RGGI), initiated in 2009 and the UK Emissions Trading Scheme, launched in 2021 (but added as an ICE Index on Jan. 31<sup>st</sup>, 2022, thus limited representation in Figure 8). As shown in Figure 8, each of the largest compliance markets have experienced accelerating growth over the past 12-18 months, but nothing like what we've seen from the EU ETS.



Figure 7: European Union Allowance (EUA) Carbon Price and Historic/YTD Futures Curve Shifts



Source: Bloomberg, Haywood Securities

Figure 8: ICE Carbon Futures Index & Constituent Relative Performance (UKA new with limited data)



Source: Bloomberg, Haywood Securities



The Voluntary Market, on the 'buy-side', provides a platform for almost any entity, public, private, NGO, individual, to offset a carbon footprint by 'buying and retiring' credits against its own GHG emissions, or trade/speculate on carbon credit prices, through carbon credit exchanges, voluntary market index price tracking ETFs, futures markets and emerging vehicles like the ones highlighted in this report, which are contemplating royalty and streaming structures, direct project investment, and carbon credit holding vehicles.

On the 'sell-side' the Voluntary Market aggregates a wide variety of current and future carbon credit generating projects or initiatives. To generate qualified and valuable credits projects need 3<sup>rd</sup> party 'validation' and 'verification'. There are a range of organizations performing this function, the largest of which are highlighted below under "Registries". The Standards have similar project-qualifying criteria across issuers. Due to the scope of 'verified' projects or initiatives, both geographically, and by project type, that have, or will, contribute to the pool of credits making up the global inventory, Voluntary Market carbon credits trade at a range of values in the market, as demand for certain attributes of the credits vary. This non-commodity-like characteristic of Voluntary Market carbon credits adds a layer of complexity and risk to assessing projects from an investment perspective as forecasting associated economics requires enhanced due diligence and market expertise. This is one reason that, as mentioned in our introduction, establishing and leveraging strategic partnerships with industry experts will be instrumental in the project identification/origination/evaluation process for business models that involve investment at the project level and rely financially on participation in project-generated credits.

Carbon credit generating projects qualifying for the Voluntary Market are diverse. Again, using Verra, the largest VCU issuer globally, and winner of the Environmental Finance's 2021 "Best GHG Crediting Programme" award (for its VCS, described in more detail below), as an example, its VCS outlines 15 'Sectoral Scopes' which projects may be developed under. The scopes capture almost any industry or genre under which projects may be developed. In Figure 9 below, S&P Global/Platts does a good job of illustrating the functional carbon credit types (reduction/avoidance and Removal) and the tech-based or naturebased project that address them.

Figure 9: Voluntary Market Credit Classes and Project Types Voluntary Carbon Market (VCM) Reduction/Avoidance Credits **Removal Credits** Carbon Credits that reduce or avoid GHG emissions. Carbon Credits that actively capture GHG emissions. Technology-Based Nature-Based Nature-Based **Technology-Based** - Renewable Energy Avoided Deforestation/ - Direct Air Capture Reforestation REDD+ Methane Collection Mineralization Afforestation Wetland Management Industrial Pollutants Carbon Capture Soil Sequestration/ No-Till Farming and Storage Biochar Household Devices/ **Energy Efficiency** Methane from Livestock Wetland Restoration

Source: S&P Global / Platts

Project quality is a key value determinant. As discussed above, the value of credits in the Voluntary Market is linked to each credits unique provenance. McKinsey Sustainability outlines a set of criteria that carbon credits should address for either of the classes noted in Figure 9, i.e. 'Reduction' or 'Removal' style credit generating projects, including the concept of "additionality". Additionality is an important concept. It means the proposed credit generating projects cannot simply be those that reduce/prevent or remove GHGs from the atmosphere, the project must require the carbon credit financial incentive to exist. This is designed to prevent, for example, unthreatened/protected forest from becoming a source of carbon credits that can be monetized. 'Additional' is key to achieving GHG emissions reductions and a net-zero future. Anything that would have performed a GHG reduction or removal function in the absence of the carbon credit incentive, does not required additional financial incentive to occur and thus does not fulfil the 'additional' criterion. McKinsey Sustainability's criteria for the creation of a carbon credit are:

- **Real and Measurable:** realized and not projected or planned, and quantified through a recognized methodology, using conservative assumptions.
- **Permanent:** not reversed; relating to projects with a reversibility risk such as forestry projects, which could suffer from fire, logging, or disease. Here, comprehensive risk mitigation and a mechanism to compensate for any reversals need to be in place.
- **Additional:** would not have been realized if the project had not been carried out, and the project itself would not have been undertaken without the proceeds from the sale of carbon credits.
- Independently Verified: verified by an accredited, independent third party.
- Unique and Traceable: transparently tracked in a public registry and not double-counted.

Carbon credit project validation and verification in the Voluntary Market is carried out by accredited entities meeting the formal program 'Standards' set forth by a small group of self-governed Standards issuers (e.g. Verra's 'Verified Carbon Standard' (VCS) (verra.org) program). These Standard programs enable owners/operators of certified projects to convert verified GHG emissions reductions into tradable carbon credits. The bodies that create these Standards for carbon credit generating projects typically assemble an advisory group made up of high profile, reputable constituents, including large Corporates, NGOs, consultants, lawyers, specialized investment funds and other interested parties, to provide engagement, transparency and creditability to the Standards issued.

The **Project certification process example:** Verra's VCS is the largest verification program in the Voluntary Market and it is worth briefly reviewing the basic elements and process for validation and verification for reader background and clarity. Verra administrates the VCS and maintains a list of independent "validation/verification" bodies (VVBs) that are approved to audit projects for conformance to VCS rules and provide certification. To become a VVB and provide validation and verification services to projects, the 3<sup>rd</sup> party must achieve accreditation by a VCS-recognized accreditation body which can audit the VVB candidate to a relevant standard (e.g. ISO 14065 to VCS). Accreditation bodies include groups like the Standards Council of Canada (SCC), American National Standards Institute (ANSI) and United Nations Climate Change (UNFCC). Once a project achieves VCS certification from the accredited VBB, the project developer is eligible to receive Verified Carbon Units (VCUs). The VCU <u>is</u> the 'carbon credit', representing the "reduction or removal of one tonne of carbon dioxide equivalent...", and must undergo the validation and verification process carried out by a VVB. Just to add another layer, VCUs can be tagged with additional certifications (co-benefits meeting United Nations Sustainable Development goals, SDGs) which can enhance the value of the credit, sometimes bridging the gap between the Voluntary and Compliance Markets.

Project Types: The universe of projects capable of achieving certification under a major standard is quite diverse between Nature-Based and Technology-Based projects. There are cookstove and low-smoke stove projects that reduce wood consumption and emissions by replacing traditional less efficient stoves, thereby reducing deforestation. Forest regeneration, reforestation, afforestation (establishing new forests and mangrove plantations). There are solar, wind farm, geothermal, biomass, biogas and mechanical carbon capture technologies, just to name a few. Our list of focus names are involved in multiple areas of the spectrum.



Registries, typically associated with carbon credit issuers, provide the digital infrastructure for recording everything related to carbon credits generated from qualifying projects and tracking their status with respect to issuance, retirement and cancellation. These include characteristics such as 'project status' (under development, verification requested, renewal requested, etc.), 'location', 'project type' (renewable, agriculture, transport, etc.), 'vintage' (period when credit was generated), 'date' and 'quantity' of credits issued, and so on. The major Voluntary Market registries aggregated in Berkeley's,

The Goldman School's "Voluntary Registry Offsets Database", which "...contains all carbon offset projects, credit issuances, and credit retirements listed globally by four major voluntary offset project registries..." include:

- Climate Action Reserve (CAR) <u>climateactionreserve.org</u>
- American Carbon Registry (ACR) <u>americancarbonregistry.org</u>
- ♦ Gold Standard goldstandard.org
- Verra verra.org

Trading platforms provide simplified access and are creating new products rapidly. Exchanges like the award-winning AirCarbon Exchange (ACX) was designed to deliver traditional commodity exchange trading functionality to the Voluntary Carbon market. The ACX has developed contracts for tokens that are backed by eligible carbon credits or a specific project type and vintage. AirCarbon offers the "CORSIA Eligible Token" or "CET", for example, with each token backed by a carbon credit eligible under the Carbon Offsetting and Reduction Scheme for International Aviation, which is a program of the International Civil Aviation Organization (ICAO). The underlying credits are held in a trust and the blockchain-based token represents a digital receipt for ownership of the credits in trust. AirCarbon offers "GNT" and "GNT+" tokens (Global Nature Tokens) which offer exposure to nature-based projects and nature-based projects with additional certifications (co-benefits e.g. CCB). Another token is coined the "Sustainable Development Token" or "SDT" contract, which is tied to project credits with increased "additionality" provenance carrying at least 3 UN SDG co-benefits.

Another major exchange is Xpansiv's CBL, which offers access to "a broad range of individual carbon-offset projects from leading registries..." for buyers with specific criteria or resources to evaluate the nuances of project-specific credits. To simplify and streamline the trading process for other participants, Xpansiv has partnered with the CME to deliver products like the GEO (Global Emissions Offset) spot (CBL) and futures (CME) contract. The GEO contract is for a carbon credit which meets the ICAO-CORSIA criteria discussed above, reducing the need for a buyer to vet each contract purchased. Xpansive also offers the N-GEO spot contract on its CBL exchange. N-GEO are 'Nature-Based' contracts which are linked to 'Agriculture, Forestry and Other Land Use' (AFOLU) projects meeting the Verra Registries Climate, Community and Biodiversity (CCB) criteria, again simplifying the decision for the buyer. Similarly, Xpansiv's C-GEO spot contract on the CBL, it is underpinned by an "energy, renewable tech-based project that meets stringent quality and integrity criteria defined by CBL".

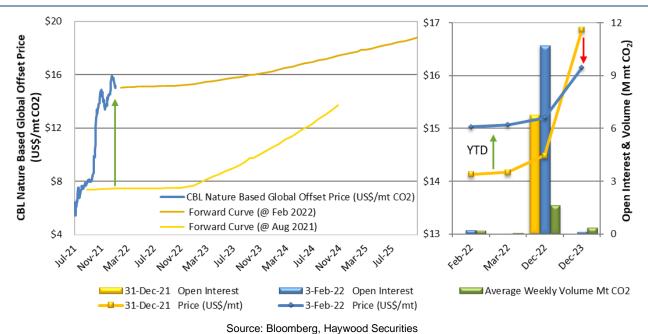
The financial markets are rapidly evolving and delivering new product to simplify direct access to carbon credits and offsets and providing hedging opportunities in the Voluntary Market. The introduction of several new spot and contract products over the past 18-months has coincided with a transformation in the composition of the seller profile in these markets as well. Some exchange operators indicate that in the past, 95% of sell trades carbon markets are supplied by project developers, with just 5% coming from 'investors'. With increasing ease of access, liquidity and standardization of the contract products for carbon developed by the exchanges, we expect financial intermediaries to play a much larger roll going forward.

**Pricing in the Voluntary Market**, as we have discussed, spot and near contract carbon prices have moved rapidly in both the Compliance and Voluntary Markets in the past 18-months. Several intermediaries are opening up the Voluntary Markets to investment, speculation, hedging and simplified access to GHG emissions offsets. With the introduction of CBL futures contracts for its Nature-Based credit (N-GEO, Figure 10) and the Global Emissions Offset (GEO, Figure 11), we can observe the increasing activity in the market. Price surges are pulling carbon offsets onto the radar of investors and speculators and we see this manifesting in increasing open interest and volumes in the futures market. The graphics below highlight that there is still a long way to go in this regard, as the right-hand side of each shows the YTD move in the forward curve for only contracts



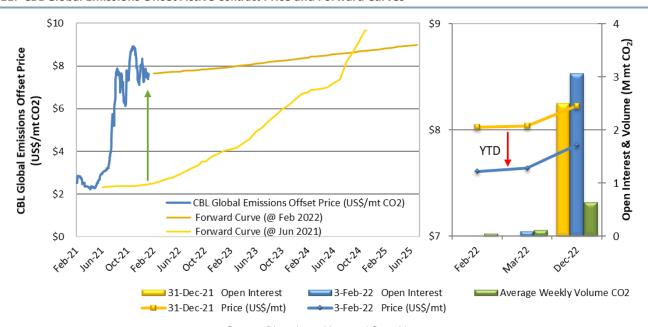
having any open interest, which is a small handful for both. As in the compliance markets, and as shown below, the historic forward curve, with its lack of liquidity, has been a weak predictor of price movement. The price spread for market-perceived quality is readily apparent below (quantified in Figure 12), with the premium pricing belonging to the AFOLU project credits reflected in the Nature-Based N-GEO contract over the CORSIA-compliant GEO credit. The differential has ballooned since the Fall of 2021, as appetite for nature-based credits has led to more aggressive price appreciation.

Figure 10: CBL Nature-Based Offset Active Contract Price and Forward Curves



Course. Bloomberg, Hay wood Gecunic

Figure 11: CBL Global Emissions Offset Active Contract Price and Forward Curves



Source: Bloomberg, Haywood Securities



Figure 12 illustrates the premium ascribed to nature-based carbon credits and growing price spread over CORSIA-eligible credits. Many of the emerging companies highlighted in this report are focused on investing, developing, participating or gaining exposure to projects generating or with the potential to generate nature-based credits likely to garner premium pricing. Token prices on the AirCarbon exchange suggest a similar price spread with the GNT+ (Global Nature Token) priced at US\$16.13 vs the CET (CORSIA Eligible Token) priced at US\$7.83. AirCarbon's GNT and GNT+ products highlight the spread for provenance among nature-based carbon credits as well, with the GNT+ token (US\$16.13) trading at a +105% premium to the GNT token (US\$7.86). Recall from above that the "GNT" (Global Nature Tokens) offer exposure to simply 'nature-based projects', while "GNT+" tokens are linked to credits generated from nature-based projects, but with additional certifications (co-benefits e.g. Verra's CCB, or 'Climate, Community & Biodiversity' Standard).

Hi: 15.91 Last Price 136.24% ■ LG0G2 Comdty 15.19 +.16 15.19 ■ UGEG2 Comdty 7.64 14.00 -12.00 10.00 Hi: 8.92 7.64 122.74% 6.00 Low: 3.43 Hi: 8.20 LGOG2 Comdty - UGEG2 Comdty 7.55 unch 7.55 6.00 ◄ 4.00 -2.00 -0.00 -Low: -0.43 Feb 0ct 2021 2022

Source: Bloomberg, Haywood Securities

Figure 12: CBL Global Emissions Offset Active Contract Price and Forward Curves



# **Investment Ideas: Emerging Carbon Plays – Haywood Focus List**

As mentioned earlier in this report, we would like to provide a high-level overview of emerging opportunities in the carbon space that are on our radar and are already readily accessible to investors as public companies, or plan to publicly list in the next few months. We have 9 companies that we would like to highlight with a brief summary/overview write-up provided on each. Each company is involved in some way in identifying, financing, advancing or developing projects that will derive cash flow from the generation of carbon credits, by sale, intermediation, royalty or streaming arrangements. Many are leveraging partnerships or alliances or with key industry players not only to identify, assess and gain access to these projects, but also to facilitate unique offerings or positioning in the space. Investment and development of carbon credit generating projects can create exposure to multi-decade streams of cash flow linked to the monetization of those credits.

With social push for carbon footprint offsetting driven by prioritization of aggressive carbon reduction/elimination goals globally, we believe the voluntary market will undergo transformative growth in coming years as every type of entity seeks access. The Voluntary Market is already undergoing a process of price discovery with the introduction of new financial products that allow for increased access and liquidity. Many industry experts cite the need for much higher prices in all markets for carbon credits/offsets, as more of the earth's GHG emissions seek to offset. With higher prices in the forecast, and already materializing, underpinned by a step change in fundamental demand, we expect to see massive investment in the sector at the project level as the carbon pricing mechanism does its job, which is to create the economic incentive to invest in global reduction, elimination, prevention and recovery of GHGs. We believe each of the nine names highlighted in this report are positioning to provide a unique opportunity to gain exposure to the rapidly evolving carbon space, with a range of business models, strategies and partnerships, giving investors a range of options to play the space. The company descriptions below summarize these strategies and core projects and provide a great cross-section of the types of investment opportunities emerging in the space.

## **Highlight Companies**

- Altius Renewable Royalties Corp. (ARR-T, \$9.46, Not Rated, Consensus Target: \$13.50)
- Base Carbon (Private, Not Rated)
- Carbon Neutral Royalty. (Private, Not Rated)
- Carbon Streaming Corporation (NETZ-NEO, \$12.66, Not Rated, Consensus Target: \$22.37)
- Global Carbon Credit Corp. (Private, Not Rated)
- Invert Inc. (Private, Not Rated)
- Osisko Green (GOGR-T, \$9.54, Not Rated, Consensus Target: \$N/A)
- Star Royalties Ltd. (STRR-V, \$0.58, Not Rated, Consensus Target: \$N/A)
- Vida Carbon Corp (Private, Not Rated)





# Altius Renewable Royalties Corp. (ARR-T, \$9.46, Not Rated, Consensus Target: \$13.50)

Passive Royalty Investments for Better Diversification and Reduced Project Level Risk

- Altius Renewable Royalties Corp. ('ARR') is a recently formed renewable energy company whose business is to provide long-term, royalty level investment capital to renewable power developers, operators, and originators through its joint venture Great Bay Renewables (see more about the JV below). Importantly, ARR doesn't intend to operate renewable energy assets or directly develop projects. Instead, the Company aims to focus on passively financing development or later stage projects in order to grow a portfolio of renewable project royalty interests. In so doing, ARR believes it can offer its shareholders better asset diversification, exposure to project redevelopment upside without the project costs and overhead, and a better corporate focus on ARR growth and scalability. As part of its passive royalty investment strategy, ARR is able to invest and create royalty interests in a broad portfolio of renewable power assets, creating a less risky portfolio that is diversified across a spectrum of geographic regions and operators. ARR also believes that its passive investment royalty model provides exposure to several forms of project upside. Specifically, the Company is able to benefit from project life extensions, re-powering, and other project enhancements, without incurring additional associated operating, development, or sustaining costs. As ARR's management doesn't need to handle operational decisions or tasks relating to the development or operation of the renewable power projects they passively invest in, ARR has more bandwidth to focus its resources on the Corporation's growth strategy of identifying and executing on renewable royalty-based investment opportunities. As such, ARR's business model allows it to scale and acquire/monitor more renewable power interests than a comparably sized operating company could effectively manage. Currently, ARR, through its subsidiaries, has royalty interests in 16 renewable energy projects and expects to become cash flow positive in 2022.
- Company background/Structure: Founded by Altius Minerals Corporation ('Altius'), as part of its founding, ARR acquired a private company, Great Bay Renewables, Inc. ('GBR'), which at the time already held a paying royalty on the 4.7 MW Clyde River hydroelectric/solar facility located in Vermont. After founding ARR, Altius Minerals Corporation funded ARR to complete US\$66 million in investments in renewable energy developers in the United States. In October 2020, ARR announced entering into a joint venture agreement with Apollo Global Management Inc. ("Apollo Funds"). Apollo Funds intended to contribute approximately US\$200 million to this business, with a US\$80 million investment required to earn a 50% interest in the GBR Joint Venture JV. Following the initial US\$80 million solely funded by Apollo Funds, ARR and Apollo Funds would then continue to fund new approved opportunities on a 50/50 basis. As of September 30, 2021, the necessary payments have been made and ARR's interest in GBR was diluted to 50% (December 31, 2020 89%). During the third quarter Apollo invested \$89,250,000 (nine months ended September 30, 2021 invested \$92,750,000). In addition to the investments by Apollo Funds in Q3, ARR funded an additional \$22,680,500 during the third quarter to co-fund investment opportunities. With the GBR JV earn in complete, as mentioned, all future investments and capital calls from GBR will now be funded equally between ARR and Apollo Funds. Meanwhile, on March 3 of last year, ARR completed its IPO raising gross proceeds of ~C\$108M. The Corporation has approximately 26.5M total shares issued and outstanding, of which Altius owns approximately 59%.
- Key Partners: In February 2019 ARR announced its first transaction of a US\$30M royalty investment in Dallas-based Tri Global Energy ('TGE'), a leading developer of wind energy in the U.S. In October 2020, the JV increased the



investment by a further US\$25 to US\$55M. The investment was structured so that as TGE sold projects from their large portfolio of development projects, a gross-revenue royalty would be payable to ARR on wind and solar projects as they are developed and sold, with additional royalties continuing to be created until a certain return threshold is met, at which time no additional royalties will be created. Wind and solar projects with royalties payable to ARR will continue to generate cashflow for the life of these projects. To date, TGE has developed and sold projects that have a royalty to ARR as follows: First royalty project, Canyon Wind (360 MW – TX), sold in October 2019 to Silverpeak Strategic Partners with operations expected to begin in Q2 2022; Woodford Wind (400 MW – IL) sold to Copenhagen Infrastructure Partners in December 2019 with operations expected to begin in Q4 2022; and Flatland Solar (180 MW – TX) sold to Silverpeak Strategic Partners in March 2020 with operations expected to begin in Q2 2022. Furthermore, TGE's development pipeline eligible for future royalties has increased to over 3,500 MW (even after accounting for the 940+ MW in project sales). More recently, ARR, through its GBR JV, has invested US\$52.5 million in Northleaf Capital Partners ('Northleaf') related to three operating-stage wind and solar renewable energy projects located in Texas. The newly acquired revenue-based royalty portfolio includes: a 151 MW Old Settler wind project, a 50 MW Cotton Plains wind project, and a 15 MW Phantom Solar project.

#### Management Team:

- **Brian Dalton**, CEO of ARR, has over 20 years of experience at Altius Minerals (current CEO), where he has helped grow the company to an asset base in excess of \$500 million through diligent implementation of the prospect generator/joint venture business model and royalty acquisition/creation.
- **Ben Lewis,** CFO of ARR, is the current CFO of Altius Minerals Corporation where he joined Altius' executive team in 2006.
- Frank Getman, current President & CEO of BGR, has over 25 years of experience in the energy industry. Prior to
  his current role at Great Bay Renewables, he acted as President and CEO of BayCorp Holdings, Ltd., a diversified
  merchant energy company, since 1998. Under his leadership, BayCorp developed, owned and operated various
  energy companies and assets including, renewable power generation facilities, oil and natural gas reserves, and
  other energy-related investments.
- Raymond Faust, CFO of BGR, has over 20 years of experience in the energy industry. Prior to his current role, Mr.
   Faust acted as COO at BayCorp Holdings. He previously worked for Waste Management, where he completed the development and financing for a \$500MM renewable energy-from-waste facility in the U.K. He has also held roles in finance and M&A at Duke Energy and started his career as an engineer working offshore in the oil and gas industry.





# **Base Carbon (Private, Not Rated)**

## Base (for the Benefit of Air, Sea, Earth) Carbon

Base Carbon is a globally diversified asset development company with a focus on sourcing, financing, developing and trading carbon credits. The Company was formed by the financial technology company Abaxx Technologies Inc. (NEO:ABXX) mid last year. Abaxx is a financial software company developing and deploying technological infrastructure for both digital marketplaces and global commodity exchanges. The company is developing a regulated commodity futures exchange in Singapore (Abaxx Exchange), and new software protocols and applications to enhance trust in electronic markets.

Base's aim is to raise and deploy capital across the broad suite of opportunities in the carbon credit market ecosystem in a risk-adjusted manner as the market evolves. Base benefits from the ability to leverage Abaxx's SaaS and focuses on sourcing, developing and selling voluntary carbon credits to CO2 emitting corporations. Since its formation last fall, the Company has already successfully raised over C\$66M and secured solid institutional backers. Notably, the Company has also sourced an impressive project pipeline of ~54 projects with identified projects and project platforms totaling over 1Gt (1billion tonnes) of potential carbon offsets through its established relationships. Base's typical investment falls between USD\$5-15M and focusses on near-term abatement and long-term nature-based projects. To date, Base has invested in one project with a second expected by the time the Company publicly lists on the NEO in March. Additionally, Base has a third potential investment in the works that it expects to be able to announce shortly after.

Concurrent with its formation, Base Carbon ('Base') purchased a 5% interest in AirCarbon Pte. Ltd. (from Abaxx), owner of the AirCarbon Exchange or "ACX". Launched in 2019, the ACX is a Singapore based carbon exchange that digitizes carbon credits and trades them on their own blockchain software. The exchange currently has a client base of approximately 90 corporate entities, financial traders, carbon project developers, and other industry stakeholders. The platform has revolutionized the voluntary carbon market, allowing traders to gain exposure to carbon as an asset class. On the ACX, every token is backed by a 1 tCO2e carbon credit that sits in the Exchange's Trust. Notably, last September the exchange was recognised as the Best Carbon Exchange in Environmental Finance's prestigious Voluntary Carbon Market Rankings 2021. ACX is also the world's first carbon negative exchange, having already offset its carbon emissions for the next year with a corporate commitment to maintain this practice going forward.

• Company background/Strategic Partners Structure: Following its formation in July 2021, at the beginning of September, Base completed a non- brokered private financing of approximately C\$16M at \$0.50 per common share. Notably, the financing was led by Robert Friedland and investors at Abaxx Technologies. Founder and co-chairman of Ivanhoe Mines Ltd., Mr. Friedland has been recognized by leaders of the international financial sector and mineral resource industries for over 30 years as an entrepreneurial explorer, technology innovator and company builder. While he has spent much of his career as a financier of base metal mines, Mr. Friedland has more recently been increasing his exposure to green companies working to mitigate environmental damage. Notably, for the past 7+ years, he has served as co-chairman of Clean TeQ Holdings Ltd., and Australian company that purifies and recycles waste water from mining. On closing, it was estimated that Abaxx would own ~21.5M shares of the 72M pro forma outstanding. In December of last year, the Company closed its second financing, raising an additional C\$50mm at \$1.00 per common share. As mentioned, Base is on track and planning on publicly listing on the NEO this March.

Last fall it was announced that Base would be entering into a technology license agreement with Abaxx. In exchange for the use of Abaxx's proprietary SaaS applications and identity management tools, Base is to pay Abaxx a 2.5% royalty on all revenues the company generated. The agreement includes a royalty buy back option for US\$150 million. Base's ability to leverage Abaxx's SaaS comes as a major competitive advantage as it assists in solving carbon credit industry problems including measurement, verification and reporting. Notably, Abaxx has developed a suite of software technology solutions that can be leveraged to digitize Base's carbon credits, enabling tracking and trading on various exchanges (such as AirCarbon or the future Abaxx Exchange).



Last September it was announced that Base entered into a Management Consulting Agreement with Hardwick Climate Business Ltd. ('HCBL'). HCBL is an experienced and market leading carbon advisory, sourcing and merchant banking platform which is run by principals with two decades of climate finance, environmental economics, and energy market experience. In November, it was later announced that proceeds from its financing would be used partially to facilitate a staged acquisition of HCBL. Through this acquisition, the Company has bolstered its expertise in green and climate finance, environmental and carbon markets, sustainable business, policy, and economics. HCBL also provides Base an impressive pipeline of high-quality projects.

- Management Team: The Base management team has decades of experience leading, sourcing, managing and financing capital investments across markets and specifically within the carbon and environmental market ecosystem.
  - Michael Costa, CEO and Director, was previously a Vice President and Portfolio Manager of Goodman & Company, Investment Counsel Inc. (Dundee Corporation) since 2013 where he was responsible for the oversight of multiple Canadian focused natural resource investment portfolios. Prior to that, Mr. Costa served as director with UBS Securities Canada and was responsible for managing the Fundamental Investment Group's Canadian principal investment portfolio. He has also previously served as Vice President at both Goldman Sachs & Co. in New York and Goldman Sachs Canada Inc., in Toronto.
  - Philip Hardwick, COO, is the Managing Partner of HCBL and has over 20 years of Investment Banking and Financial experience in the field of Energy and Climate Change. An economist by training, he has been a Director of both J.P. Morgan and Barclays. During his career, Mr. Hardwick has executed transactions varying in size and scope covering the Energy complex, Green Finance, Carbon Markets, Sustainable Infrastructure and Agriculture. His experience spans highly complex derivative transactions in European Energy Markets, United Nations CDM project finance, small scale renewables project finance, National strategic energy asset and corporate M&A, equity growth strategy finance for climate change mitigation related businesses amongst others. His advisory experience is extensive, an advisor to Governments in Europe, Asia and Latin America on matters of Green Finance, Carbon Markets and Environmental Economics. Mr. Hardwick also teaches for university courses and corporate training. A student of Environmental Economics prior to the days of the Kyoto Protocol, he has observed Environmental Markets grow from concept to reality.
  - Wes Fulford, CFO, was previously interim CFO and Head of Business Development at Abaxx. Prior to joining Abaxx, Wes
    was the CEO and Director of TSXV-listed Bitfarms Ltd., leading the company to 291% operational growth in 2019 and
    cementing Bitfarms' position as one of the largest publicly-traded companies in its market sector. He has spent 15 years
    in investment banking and asset management primarily based in Toronto, Canada, at one time leading the Fintech and
    Financial Institutions investment banking practice for Desjardins Capital Markets
  - Bruce Tozer, Incoming Director, is an environmental and carbon finance specialist. He previously served as Managing
    Director and Global Head of Environmental Markets at JP Morgan, where he led the strategy and global build out of the
    business. He is the former Managing Director and Global Head of Structured Trade, Commodity Finance and Risk
    Management for Rabobank. Additionally, he consults in environmental markets, commodities, agribusiness investment
    and ESG including a Lead Advisor role in Carbon at Abaxx Exchange.
  - **Bill Pazos, Senior Advisor,** is the Managing Director and Co-founder of AirCarbon Pte. Ltd. Previously, Mr. Pasos served as Managing Director of Standard Bank Plc. as the Global Head of Carbon Origination and Finance. Prior to Standard Bank, he was the CEO and a founding partner of Ecoinvest Carbon S.A., a joint venture company with Bunge S.A. and one of the world's largest global carbon project developers.
  - Andrew Fedak, Chief Strategy Officer and Director, is a Founder and Chief Strategy Officer of Abaxx Technologies. He
    has successfully scaled ventures in emission capture technology in the California wine industry, environmental impact
    projects involving the global coffee industry and software technology including data networking, ecommerce systems,
    SaaS and machine learning platforms, and in resource industries including, base and precious metals.
  - Margot Naudie, Director, brings over 25-years of capital markets experience. She has held senior roles at leading multi-billion-dollar asset management firms including TD Asset Management, Marret Asset Management Inc. and CPP Investment Board. Ms. Naudie is the President of Elephant Capital Inc. as well as Lead Independent Director of Abaxx Technologies Inc. She is a Director of BTU Metals, where she sits on the Audit Committee and acts as Compensation Committee Chair.





# **Carbon Neutral Royalty Limited (Private, Not Rated)**

### Mangroves, the World Champions of Carbon Capture

Carbon Neutral Royalty Limited ('CNR') invests in climate solutions projects, offering flexible financing for projects where CNR makes an upfront payment in return for a fixed percentage of the future carbon credits at a predetermined price. CNR invests across all stages of projects from existing issuers to projects awaiting verification. The Company has established itself as a leader in the premium Blue Carbon segment of the market.

Blue Carbon is the carbon stored in coastal and marine ecosystems such as mangroves, tidal marshes and seagrass meadows. Mangroves sequester carbon at a rate two to four times greater than mature tropical forests, storing three to five times more carbon per equivalent area than tropical forests. Mangroves serve many functions including providing habitats for 341 species, considered threatened by the IUCN. They are also essential to maintaining water quality. Their dense network of roots and surrounding vegetation filter and trap sediments, heavy metals, and other pollutants. This aids in preventing contamination of downstream waterways and protects sensitive habitats like coral reefs and seagrass beds below. These intertidal forests also foster huge biodiversity, providing a habitat for thousands of species at all levels, as well as stabilize coastlines and provide natural barriers protecting coastal communities from increased storm surge, flooding, and hurricanes.

CNR has entered into a landmark Partnership Agreement with the Worldview Group of Foundations, the world's largest issuer of blue carbon credits (VCS). Worldview currently has foundations across 6 countries with over 100k ha under MOU for mangrove restoration in multiple countries as well as an MOU for seagrass conservation. Worldview has planted over 20 million mangroves to date and in doing so has established the world's largest mangrove gene bank. Worldview plans to expand into 8 new countries in 2022 and 2023. CNR has the flexibility to make staged payments with fixed planting costs per hectare. CNR is entitled to 50% of the project credits with a higher percentage of up to 75% in the early years. The carbon schedule for wet tropical mangroves based on planting 50,000 ha is expected to generate over 40M carbon credits to CNR over 30 years. October 2021 selling prices for Worldview's phase 1 project were \$29/t with the significant premium due to the high demand for Blue Carbon and the project meeting a number of the UN's Sustainable Development Goals.

CNR has also recently entered into a 31k ha for a conservation and sustainable land management project in Mozambique and has completed a PFS. The Company has been granted a 50% royalty on all credits produced, and 10% on any other projects the developer pursues in country without the need for further investment by CNR.

Finally, another notable highlight for CNR is its partnership agreement with Abatable, a tech enabled project evaluator with a proprietary framework to evaluate the quality of the offsets and project developers. Abatable monitors over 1,000 developers and CNR benefits from this market intelligence and deal pipeline.

- Management Team: CNR has an impressive Board and Advisory team with a wide breadth of experience, including Brett Heath, Erik Solheim and John Mitnick.
  - **Mr. Heath** brings expertise in structured finance, corporate finance, and the investment management industry. He is currently the President and CEO of Metalla Royalty & Streaming Ltd. and a non-executive chairman at Nova Royalty Corp, two companies he founded and listed.
  - Erik Solheim serves as an advisor to CNR. Previously, Mr. Solheim was an Executive Director of the UN Environment Programme, and prior to that, the chair of the Development Assistance Committee of the Organization for Economic Co-operation and Development. In this role, Mr. Solheim emphasized the role of private



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- sector and tax in development finance, spearheading the Sustainable Development Investment Partnership and the Addis Tax Initiative. He also focused on the need to channel more aid to least developed countries and bring new members and partners to the Development Assistance Committee. Additionally, from 2007 to 2012, Mr. Solheim held the combined portfolio of Norway's Minister of the Environment and International Development, and from 2005 to 2007 served as Minister of International Development.
- John Mitnick serves as an advisor to CNR. From 2001 to 2002, he served as a Counsel to the Assistant Attorney General of the Antitrust Division within the United States Department of Justice. From 2002 to 2004, he served as an Associate General Counsel for Science and Technology at the United States Department of Homeland Security. During the presidency of George W. Bush, he served as Deputy Counsel of the Homeland Security Council (2004-2005) and then as Associate Counsel to the President (2005-2007). He was nominated by President Trump in August 2017 to serve as General Counsel of the United States Department of Homeland Security and was confirmed by the United States Senate by voice vote on February 15, 2018.





# Carbon Streaming Corporation (NETZ-NEO, \$12.66, Not Rated, Consensus Target: \$22.37)

Proven Projects Already on the go with Impressive Pipeline on the Horizon

- Carbon Streaming Corp. is focused on acquiring, managing and growing a high quality and diversified portfolio of investments in projects and/or companies that generate or are actively involved with both voluntary or compliance carbon credits. Its goal is to provide investors with a diversified portfolio of carbon credit streams for potential price appreciation without the operational risk. The Company was incorporated in 2004 and originally focused on the acquisition of precious and rare high tech metal exploration properties in Mexico, Nevada, United States and in Ontario, Canada. Carbon Streaming Corp was established at the beginning of 2020 when the Company changed its primary business from mineral exploration to becoming a company focused on the regulated and voluntary carbon offset and sequestration sectors. On July 27, 2021, the Company commenced trading on the NEO Exchange under the symbols "NETZ" where shares appreciated 118% by Dec. 31, 2021. Over the past year, the Company has successfully raised US\$140M and secured carbon credit streams on four high quality REDD+ projects at different stages of development (UNFCCC created the REDD+ [Reducing Emissions from Deforestation and forest Degradation] framework to measure and value natural carbon stocks as they change over time).
- Global Investment Portfolio with Robust Pipeline: The Company currently has carbon credit streams and investments in 4 projects across the globe with expected delivery of between 5-5.6 million attributable carbon credits in 2022 alone. Additionally, Carbon Streaming has sourced a potential deal pipeline of over US\$700 million with its near-term pipeline valued at approximately US\$200 million at target IRRs of over 15%. The Company protects its credit integrity by focusing on project developers with a successful track record, while also engaging third-party auditors to conducts an independent review. See project highlights below:
  - tropical lowland peat swamp forests, an endangered ecosystem, and is the native home to the Bornean Orangutan as well as other endangered and threaten species. The project, encompassing ~64,000 hectares, prevents the ecosystem from being converted into palm oil plantations, protecting over 600 species of flora/fauna and 100 local animal species, while also protecting the adjacent Tanjung Puting National Park by creating a buffer zone on its eastern border. Rimba Raya was developed by Infinite-EARTH Limited and started producing carbon credits in 2009, where over the 30-year life of the carbon offset project, it was expected to reduce and avoid emissions of 130 million tonnes of CO2e. It is one of the world's largest REDD+ projects and, after assessing a 20% risk buffer, is estimated to reduce emissions by ~3.5 Mt CO2e per year. It was the first REDD+ project and first "triple-gold" Climate, Community and Biodiversity project independently validated by Verra (Verra, or The Verified Carbon Standard, develops and manages standards that are globally applicable and advance action across a wide range of sectors and activities). Carbon Streaming has entered a stream agreement for the right to receive 100% of the carbon credits generated by Rimba Raya (approximately 3.5 million credits per annum) less up to 635,000 carbon credits per annum that are already committed to previous buyers. Rimba Raya is expected to generate 70 million credits over the next 20 years.
  - The MarVivo Blue Carbon Project: MarVivo is located in Baja California Sur, Mexico and hosts a unique ecosystem
    of mangrove and marine conservation networks known for its pristine habitat and incredible biodiversity. The
    MarVivo Blue Carbon Conservation Project devoted to the preservation and sustainable management of
    approximately 22,000 hectares of mangroves and 137,000 hectares of surrounding marine environments and is



anticipated to be one of the largest blue carbon conservation projects in the world (as previously mentioned, blue carbon refers to carbon stored in coastal and marine ecosystems, which are highly efficient at sequestering carbon). The project is currently in the development stage and is anticipated to generate 0.8 million carbon credits per year. Carbon Streaming has agreed to invest US\$6 million to implement the proposed MarVivo Blue Carbon Conservation Project, comprised of an initial US\$2.0 million that was paid at closing and a further four separate US\$1 million investment payments at specific project milestones. The Company will have the right to purchase each year the greater of 200,000 carbon credits or 20% of the annual verified carbon credits from the project.

- The Cerrado Biome Project: The Cerrado Biome Project is an Avoided Planned Grassland Conversion grouped REDD+ project located in the Cerrado biome, Brazil. The Cerrado biome is the second largest biome in Brazil and is considered one of the most biodiverse savannah regions in the world. However, since 1985, the Cerrado biome has lost 46.8% of its native vegetation to agriculture. The project's objective is to protect and preserve native forests and grasslands in this threatened ecosystem due to the expansion of commercial agriculture. The Project currently consists of two parcels of land totalling ~11 thousand hectares that are anticipated to generate 0.1 million carbon credits per year. Carbon Streaming has agreed to make a US\$512,258 investment with Ecosystem Regeneration Associates ERA Brazil ("ERA"), to develop and expand the Cerrado Biome Project. Approximately US\$250,000 has already been paid, with the remaining to be paid in two separate payments at specific project milestones during development, implementation, validation and verification. The Company's expectation is that the Project will generate an average of ~0.5 million carbon credits per year over its 30-year project life, with initial generation of ~0.1 million carbon credits per year.
- The Bonobo Peace Forest Projects: The Bonobo Conservation Initiative (BCI) is developing two carbon credit projects in the Bonobo Peace Forest (BPF) located in the Democratic Republic of Congo. The BPF is a biodiversity corridor of community-managed land in the Congo rainforest spanning 5,258,700 hectares of conservation area. The REDD+ projects will be dedicated to the preservation of the endangered bonobo (Pan paniscus), a great ape closely related to humans, and their native rainforest habitat. The two projects plan to mitigate current threats of deforestation and degradation through natural resource management, covering two distinct protected areas making up ~67% of the BPF and offer a combined potential to avoid and remove hundreds of millions of tonnes of CO2e over 30 years. Still very early stages, Carbon Streaming's initial investment will be directed to prepare feasibility studies and establish initial project activities. Further capital may be committed to projects in both reserves upon completion of due diligence and execution of definitive carbon credit stream agreements, with specific milestone investments to be determined.
- The Company is not only focused on climate action but also on making an impact beyond carbon to create a more sustainable future. Some of its more recent examples of this are its efforts to improve the livelihoods of the communities surrounding its projects including: The implementation of floating healthcare clinic, solar lanterns and water filters at Rimba Raya, as well as facilitating scholarships, training and financing micro enterprises for women; Establishing new economic opportunities, such as sustainable sea scallop farming at MarVivo; and water quality monitoring at Cerrado.
- Management Team: The Company's management team has 20+ years of stream financing, investment and corporate finance experience, and has executed over 50 streaming investments totaling over \$2 billion. Additionally, Carbon Streaming is supported by an advisory board with experts in carbon markets and carbon offset projects.
  - Justin Cochrane serves as a Director and Chief Executive Officer. He has twenty years of royalty and stream financing, M&A and corporate finance experience. He previously served as President and CEO of Nickel 28 Capital Corp. and formerly President, COO and director of Cobalt 27 Capital Corp. and formerly on the board of Nevada Copper Corp. Both companies focused on streaming and royalty agreements on battery metals. Prior to Cobalt 27, Mr. Cochrane served as the Executive Vice President and Head of Corporate Development for Sandstorm Gold Ltd. With expertise in the structuring, negotiation, execution and funding of royalty and stream financing contracts around the world, He managed over \$2 billion in equity + debt across 50+ projects.
  - **Geoff Smith**, President and Chief Operating Officer, has over 15 years of M&A and corporate finance experience having advised on or financed many of the largest and most complex and innovative streaming transactions in the



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- past 10 years. Prior to joining Carbon Streaming, Mr. Smith served as Managing Director for Scotiabank's Investment Banking Division.
- Conor Kearns serves as Chief Financial Officer. He has nearly two decades of accounting, auditing, finance and tax structuring experience providing advisory services to a wide array of businesses, with a recent focus on streaming and royalty businesses. He previously served as the CFO of Nickel 28 Capital Corp. and prior to that as Vice President of Finance of Cobalt 27 Capital Corp.





# **Global Carbon Credit Corp. (Private, Not Rated)**

### **Creating a Diversified Carbon Credit Portfolio for the Masses**

- Global Carbon Credit Corp. ('GCCC') is a Vancouver based Company focused on addressing the gap in the market for an access product for taking speculative positions in the voluntary carbon market. The Company is focused on creating a portfolio of voluntary credits from various project types, and across geographical locations and vintages that have been verified by recognized voluntary market registries. Its plan is to actively purchase credits today and to hold for long-term appreciation, and by doing so, allow investors to actively participate in the overall voluntary market while minimizing risk to any specific project or jurisdiction. With a specific focus on the voluntary market, where non-regulated entities can purchase carbon credits and pricing is determined by market fundamentals and project attributes, GCCC sees significant growth potential. To date, the Company has already purchased millions of voluntary credits. In 2021 alone, the voluntary carbon market hit ~US\$1 billion in value, a whopping >110% increase over 2020's ~US\$473M. With companies striving to meet their net-zero pledges by 2050, the voluntary market is posed for exponential growth and rising prices. With few ways for investors to gain diversified exposure to the voluntary market (no current ETFs etc.), GCCC is positioning itself to address this need. The Company is currently a non-trading reporting issuer and anticipates being listed on a Canadian exchange in the first half of the year.
- Management Team: The Company runs a lean business model, keeping G&A and overhead at a minimum. Prior to listing on an exchange, the Company intends to appoint a new board of directors which is expected to include the following individuals<sup>1</sup>:
  - Anthony Milewski, Executive Chairman Designate, is the Chairman of Nickel 28 Capital Corp., and prior Chairman and CEO of Cobalt 27. He has spent his career in various aspects of the mining industry, including as a company director, advisor, founder and investor. In particular, he has been active in the commodities related to decarbonization and the energy transition, including nickel, cobalt, copper and carbon credits. Anthony has served on the London Metals Exchange Cobalt Committee, which includes representatives from the largest mining and commodities companies globally, to represent the interests of the industry to the board of directors the LME.
  - Lance Frericks has a deep knowledge of trading and commodities. He started his career at the CME group as a Eurodollar options trader and, for 20 years, was the largest trader in the S&P pit, managing capital, trading a large position daily. He was a liquidity provider, served as a liaison between brokers and customers and helped to execute orders at a fair market price as a market maker.
  - Ron Schmitz is the President of ASI Accounting Services Inc., a firm that has provided administrative, accounting and office services to public and private companies since 1995. He has served as a Director, CEO and CFO of various public companies since 1997.
  - **Philip Williams** is President, CEO and Chairman of Consolidated Uranium Inc. He was previously Managing Director at Dundee Capital Markets (now Eight Capital), an investment bank focused on the mining sector. He also worked as a research analyst at Westwind Partners covering a range of commodities and was VP Business Development at Pinetree Capital Ltd.





# Invert Inc. (Private, Not Rated)

# The Ecosystem of a Greener Future

- Previously known as The Net Zero Company Ltd., the Company has recently been rebranded to Invert Inc. Invert's goal is to bridge the gap between carbon offset projects and a diverse range of offset buyers by positioning itself at the centre of the transaction and building an ecosystem for consumers. The Company invests in a balanced portfolio of projects via streaming agreements. By providing non-dilutive funding to rigorously evaluated and vetted carbon project developers to advance or expand their projects, Invert obtains a % of the long-term stream of offset credits generated. At the heart of Invert's competitive advantage and unique positioning is its consumer ecosystem. The Company is in the process of creating a user platform that will allow customers direct, informed access to purchase carbon credits and invest in fighting climate change. Effectively acting as a trading platform, the user platform will also provide high quality content. This is planned to consist of project updates, podcasts, data driven imagery and videos (potentially encouraging sharing and re-posting on social platforms), and finally sponsored post opportunities to highlight green companies. Additionally, the Company also works with strategic corporate clients directly to address their carbon market and carbon driven ESG targets. Invert is a direct provider of high-quality diversified offset portfolios to large-scale purchasers in hard-to-abate industries/sectors. This includes corporate clients engaging the Company for help meeting their long-term carbon emissions strategy though recurring monthly service fees or a commission on annual carbon offset portfolio sales model. The Company has also secured several top tier strategic partnerships to complement its in-house carbon credit business development team and to support its B2B services division.
- Leading Strategic Investor Invert's in-house streaming expertise is bolstered by its core strategic early investor, Altius Minerals (TSX:ALS). The endorsement by Altius is a key differentiator in the carbon streaming competitive landscape, validating the quality of Invert's rapidly expanding carbon credit project pipeline.
- Management Team with Proven Track Record: Invert is run by proven management with its core team the founders of Canopy Growth Corporation, where they built the company from a start-up to the world's largest cannabis company. Not new to the challenges, regulations, and complexities of growing a start-up in a nascent industry, the leadership team successfully positioned Canopy Growth Corp as the first publicly traded cannabis company in the world, as well as the first to be listed on both the Toronto and New York stock exchanges. They grew the company in excess of 7,500% over the 5-year period from its pre-IPO in early 2014 and reached over \$540 million in annual revenue. Throughout this period, the management team executed on over 30 M&A transactions and over 15 rounds of financing. In addition to experience operating and growing start-ups in emerging markets, Invert's management team also brings to the table over 25 years in carbon and environmental market experience, over 20 years of institutional capital markets experience, and over 20 years of agricultural finance experience.
  - Notably, Mark Zekulin serves as Invert's executive chairman. He is the former CEO of Canopy Growth Corp and holds a Masters in Law from the University of Cambridge. He is a Founding Partner at The Greater Return, a mission-oriented private investment company focused on investing in early-stage companies that are building disruptive and resilient, future-focused companies.
  - Andre Fernandez and Rade Kovacevic serve as co-CEO's at Invert. Mr. Fernandez is the former COO at Canopy
    Growth Corp., prior to which, he worked in manufacturing finance and asset management through his roll at Fiat
    Chrysler Automobiles. Mr. Kovacevic is the Founding Partner at The Greater Return, a privately-held, mission-



# **Industry Report: Carbon / Emissions Sector**

- oriented investment company targeting early-stage entrepreneurs and companies that have identified a next generation regulatory market or societal change. He is also the former President and Chief Product Officer of Canopy Growth Corp.
- Invert's leadership also benefits from the experience of **Gabriel Sheets-Poling** as Strategic Lead, Carbon Projects & Trading. Mr. Sheets-Poling is a carbon market and trading expert. He is the former head of Pricing & Global Markets at Indigo where he led Indigo Marketplace development from concept to commercialization resulting in over \$1B in grain transactions in less than 18 months, establishing the largest neutral grain trading platform in existence. He is also the Chief Strategic Officer for Cloud Agronomics, a soil carbon offset company located in Colorado.





# Osisko Green Acquisition Limited (GOGR-T, \$9.54, Not Rated, Consensus Target: \$N/A)

### Positioning to provide bespoke ESG exposure

- Osisko Green Acquisition Limited is a newly organized special purpose acquisition corporation ('SPAC'). Sponsored by Osisko Green Sponsor Corp., a wholly owned subsidiary of Osisko Mining Inc. (OSK-T, Buy Rated, \$7.25 Target), Osisko Green intends to focus its search for target businesses or assets involved in the shift away from fossil fuels. Not limited to any particular industry or geographic region, Osisko Green's primary objective is to become a leading company in commodities required for the green energy transition. Specifically, Osisko Green Acquisition believes that the battery minerals sector and its supply chain will present one of the biggest opportunities to realize value over the next generation. According to the Company, it will be committed to various ESG initiatives by targeting businesses that operate in jurisdictions where human rights and sustainability are a priority and making use of responsible, ethical supply chains
- Strong Investors/IPO: Founding investors include Osisko Mining Inc. and Osisko Gold Royalties Ltd. Additionally, pre-IPO in July 2021, Queen's Road Capital Investment Ltd. (TSXV-QRC) announced its intention to participate as an Initial Funding Investor in the Osisko Green initial public offering with a participation of approximately C\$20 million. The Queen's Road Capital team brings with it a wealth of mining industry experience as well as a diversified pool of capital. In September 2021, Osisko Green closed its IPO of 25,000,000 Class A restricted voting units at \$10.00 per unit for aggregate proceeds of \$250,000,000. Following which, the underwriters partially exercised their over-allotment option to acquire an additional 817,000 Class A restricted voting units at \$10.00 per unit for additional gross proceeds of \$8,170,000. Concurrent with the Closing, Osisko Green Sponsor Corp., along with Osisko Gold Royalties Ltd. and certain officers and directors of the Corporation, as well as investors, including Queen's Road Capital Investment Ltd., purchased an aggregate of 7,875,000 share purchase warrants at an offering price of \$1.00 per Funding Warrant for aggregate proceeds equal to \$7,875,000.
- Management Team: Osisko Green is managed by a leadership team with an extensive track record of success in the mining industry. Notably, the Company is led by Sean Roosen, John Burzynski and Robert Wares, who have co-founded and led one of the most successful mining groups of the past two decades. The trio is most notable for founding, building, operating and eventually selling Osisko Mining Corp. (owner of the Canadian Malartic Mine) to Agnico Eagle and Yamana in 2014. They have founded numerous companies and collectively raised over C\$3.4 billion in capital, created over C\$10 billion of shareholder value and discovered more than 100 million ounces of gold while overseeing the construction of over 20 mines.
  - **Sean Roosen** is the Chairman and CEO of Osisko Green. Mr. Roosen has +30 years of experience in the mining industry, currently serving as Executive Chairman of Osisko Gold Royalties, Chairman & CEO of Osisko Development and Director of Osisko Mining Inc.
  - **Don Njegovan** serves as Osisko Green's President. He is currently the Chief Operating Officer of Osisko Mining Inc. He was a director of St. Andrew Goldfields until it was acquired by Kirkland Lake Gold in 2016 and is currently on the Board of Directors of Sable Resources, Ascot Resources Ltd. and Strongbow Exploration Inc. He was formerly Managing Director of Global Mining at Scotiabank from August 2010 to June 2014.



# **Industry Report: Carbon / Emissions Sector**

- Alexander Dann is the Chief Financial Officer & Corporate Secretary of Osisko Green. He currently holds the
  position of Chief Financial Officer of Osisko Development Corp. Mr. Dann is a CPA with over 25 years of experience
  leading financial operations and strategic planning for multinational public companies, primarily in the mining and
  manufacturing sectors.
- John Burzynski is a Director of Osisko Green. Mr. Burzynski is a geologist with +30 years' experience, currently serving as Executive Chairman, CEO & Director of Osisko Mining Inc.; Chairman of O3 Mining; and Director of Osisko Development, Osisko Metals and Major Drilling.
- Robert Wares is a Director of Osisko Green. Mr. Wares is a professional geologist with 35+ years of exploration experience. He is currently the Chairman & CEO of Osisko Metals, Chairman & CEO of Brunswick Exploration, and Director of Osisko Mining Inc. and Titan Mining and Energy.





# Star Royalties Ltd. (STRR-V, \$0.58, Not Rated, Consensus Target: \$N/A)

### You CAN have your Gold and eat your Carbon Credits Too

- Star Royalties Ltd. is a precious metals and green royalty and streaming investment company that created the world's first carbon negative gold royalty platform and offers investors gold exposure with an increasingly negative carbon footprint. The company's aim is to "provide investors with commodity price leverage, expansion, optimization, and exploration upside, without the direct risk of operating cost inflation, exploration and capital expenditures, and logistical requirements of managing an operation". Its focus is on underwriting tailored royalties and streams that optimize its counterparties' risk-adjusted cost of capital while allowing Star Royalties to achieve above-threshold returns. It does so through reviewing opportunities with an emphasis on: value and quality over quantity, risk management with focus on top-tier jurisdiction, after-tax internal rate of return metrics, relative return on invested capital, free cash flow per share accretion, and net asset value per share accretion. While the Company continues to target a long-term 80% capital allocation to precious metals, it has directed the remaining 20% to green investments, which currently includes the development of carbon offset credit projects (biosequestration and renewable energies), green technology opportunities (diesel usage displacement) and battery metals investments (copper, nickel, lithium). The goal was to position the Company to be carbon negative by 2023, by more than offsetting the Company's direct CO2 emissions from corporate activities and attributable CO2 emissions sourced from its gold equivalent ounces. Meanwhile, in October 2021, Star Royalties created a separate corporate entity, Green Star Royalties ('Green Star'), to further the growth of its green portfolio beyond its original 80/20 allocation framework. Through Green Star, the Company aims to provide shareholders with exposure to an anticipated dramatic rise in carbon credit pricing required to reach global greenhouse gas emission reduction targets by 2030, as outlined in the Paris Agreement. According to the Company, Green Star is expected to generate approximately 5,500 carbon offset credits per year starting in 2023. By progressively expanding its net negative CO2 balance with further green investments, Star Royalties will offer investors commodity price leverage and exposure with an increasingly negative carbon footprint. Additionally, investors will be gaining exposure to rising carbon credit pricing and to superior returns through the origination of green royalties and streams.
- Key Partners/Projects: One of Green Star's competitive advantages arise from its collaboration with Bluesource Canada ULC ('Bluesource'), North America's leading carbon offset developer. Bluesource has pioneered creative solutions to the climate crisis since 2001, with deep expertise across environmental technologies and markets. With more than 200 active projects in the United States and Canada, Bluesource is a leader in voluntary, compliance and pre-compliance carbon, renewable energy attribute, renewable natural gas and energy efficiency markets.

Elizabeth Metis Settlement ('EMS') Forest Carbon Project: Located in Alberta, Canada, the EMS Forest project is operated by Elizabeth Metis Settlement with assistance from Bluesource. The carbon offset project covers a forested area of 15,457 hectares and has the potential to sequester significant amounts of CO2 per year. Green Star Royalties has a 40.5% GR Royalty on this development stage project.

Lac Seul First Nation Forest ('LSFN') Carbon Pilot Project: AurCrest Gold and Bluesource are assisting Lac Seul First Nation in developing forest carbon sequestration opportunities on the Nation's Reserve lands and Traditional Territory that the parties expect to result in carbon offset credits. The LSFN Forest development project is located in Ontario Canada and covers a forested area of 22,063 hectares of the Nation's Reserve lands. Green Star has a 16% Gross Revenue Royalty on AurCrest Gold's forest carbon sequestration revenue share from the Forest Pilot Project.



MOBISMART Mobile Off-Gid Power & Storage Inc. Project: Earlier this year, Green Star invested in a Toronto based, high-growth technology company, MOBISMART, whose products reduce or offset CO2 emissions in environmentally-sensitive areas by displacing diesel usage. For total consideration of C\$300,000, Green Star received a 2.5% gross revenue royalty on all current and future gross revenues and any potential business divestment revenues generated by MOBISMART, for a term of 15 years, with the first payment of the royalty expected no later than January 2023.

Regenerative Agriculture Carbon Pilot Project: Regenerative Agriculture is located in the midwestern U.S. and operated by Bluesource and Locus Agricultural Solutions. The development stage project aims to promote topsoil health regeneration and to rebuild soil organic matter while improving water management, reducing or eliminating nitrogen-based fertilizers, increasing biodiversity, and implementing low tillage and cover crop practices. The pilot program has a 11.5-year term, with future carbon credit revenues, net of expenses, to be split between growers, Bluesource and Green Star. Green Star anticipates generating annual revenues equivalent to approximately 100,000 carbon offset credits from this project.

- Management Team: The Star Royalties management team has worked together in various capacities for more than 20 years, bringing a combined expertise of more than 100 years of prior senior mining-specific roles held in portfolio management, equity research, corporate development, investment banking, mining operations, mineral exploration and corporate finance. The Company's management has been recognized for best-in-class risk-adjusted mining investment returns and mining research, and has an award-winning track record of successful capital allocation and risk assessment, leading to 13 Lipper awards and 7 Brendan Wood International Top Gun awards. The Star Royalties team has worked together in various capacities for more than 20 years.
  - Tony Lesiak is the Executive Chairman and a Director of Star Royalties. He was formerly Senior Advisor, Investment Banking at Canaccord Genuity where he focused on the mining royalty and streaming space. Mr. Lesiak was previously Managing Director and Global Head of Mining Research at Canaccord Genuity and was responsible for coverage of the Canadian large capitalization precious metal equities.
  - Alex Pernin is the Chief Executive Officer and a Director of Star Royalties. He was previously responsible for
    managing capital allocation and corporate development at Barrick Gold where he oversaw all major internal, jointventure and M&A opportunities. He was involved in the US\$6 billion Randgold Resources acquisition, the largest
    gold sector acquisition in a decade, as well as the US\$5 billion Barrick Gold Newmont Mining Nevada Joint
    Venture. Prior to Barrick Gold, Mr. Pernin was in equity research at Canaccord Genuity where he covered junior
    and mid-capitalization precious metals producers as well as royalty and streaming companies.
  - **Kevin MacLean** is the Chief Investment Officer of Star Royalties. He has over 30 years of experience specializing in precious metals and mining investments. He was the senior portfolio manager heading the resource investment team at Sentry Investments until 2017, with peak assets under management of approximately \$2 billion. Mr. MacLean received 13 Lipper awards over multiple time periods for best risk-adjusted returns in the gold mining sector and was the recipient of seven Brendan Wood International Top Gun awards for recognition of being a leading mind in the gold mining sector.
  - Peter Bures is the Chief Business Development Officer of Star Royalties. He has over 20 years of mining and metals
    capital market experience, where he was most recently with Canaccord Genuity as a VP Analyst covering precious
    metals producers and royalty and streaming companies. Previously, Mr. Bures was at BMO Capital Markets (New
    York) as a Director of Global Mining Sales as well as at Sentry Investments as an Associate Portfolio Manager where
    he specialized in mining and metals equities and co-managed several top-ranked funds.
  - **Kenneth Ngo** is the Chief Financial Officer and Corporate Secretary of Star Royalties. He has over 20 years of progressive finance experience across several publicly traded companies, ranging from financial reporting, financial planning and analysis, equity administration, treasury and tax.





# **Vida Carbon Corp (Private, Not Rated)**

### **Leveraging Industry Leading Partners and Bench Strength**

- Vida Carbon is a private, Vancouver based Company, that aims to create value through its long-term, mutually beneficial relationships with reliable carbon project operators and developers. The Company provides upfront capital in exchange for percentage of a project's revenue or carbon offsets. Flexible/dynamic in its investment approach in order to stay ahead of a rapidly changing/growing market, Vida Carbon's investment structures can vary from royalty, streaming, or offtake agreements. Their investment approach remains guided by three main principals: active portfolio management and diversification, direct price exposure, and no operational risk. Additionally, the Company is focused on structuring its investments to allow for significant upside potential. Specifically, Vida Carbon is pricing its investments to a base return >10% IRR (at average offset price of US\$8.50/offset). Furthermore, Vida Carbon can offer its investees leading technical and marketing services, access to global networks and support throughout the multi-decade life of the investment. Vida Carbon has entered a strategic partnership agreement with ClearBlue Markets ('ClearBlue'), an advisory firm and one of the global leaders in the carbon markets. ClearBlue brings over 100years of collective experience in the sector and provides strategic support to the Company through technical expertise and global market relationships, access to projects, and commercialization. Notably, the directors of ClearBlue have global experience in carbon markets including offset projects, market analysis, policy and trading. Additionally, the Company is led by Partners of Inventa Capital Corp, a venture capital advisory firm dedicated to the acquisition and development of assets in the green economy and natural resource sector. Vida Carbon's current investments are scalable and expected to generate near term revenue. The Company anticipates a public listing on the NEO by mid 2022 and is currently reviewing a number of investment opportunities globally with an established pipeline of highquality, value accretive acquisition targets.
- **Key Partners:** As mentioned, one of Vida Carbon's partners is ClearBlue Markets. ClearBlue is an award-winning company specializing in carbon pricing advisory, market analysis, transactions, and offset development. With over 20 years of practical experience in carbon policy and market trading, ClearBlue is a huge competitive advantage for Vida as a fully vertically integrated consulting firm. As a founding shareholder in Vida Carbon and currently the company's largest shareholder, Clearblue has been an active participant in past financings. Vida Carbon's partnership with ClearBlue allows it to source the highest quality assets, structure transactions in an optimal manner and receive downstream support in the monitoring of projects and sale of carbon offsets. Meanwhile, Vida Carbon's other notable partner, Inventa Capital, has raised and deployed over \$500m in capital into related companies and created over \$2 billion in shareholder value since its inception in 2017. It was in 2020 that Inventa expanded its attention beyond metals and mining to include energy and carbon neutrality focused investments and is now actively developing ventures in the carbon offsets, hydrogen and renewable energy markets.
- Management Team: Vida Carbon is led by natural resources executives with substantial experience in finance, capital markets, and business incubation.
  - **Veljko Brcic** is a Co-Founder, CEO and Director at Vida Carbon, as well as a Partner and Head of Corporate Development at Inventa Capital. He has over 10 years of experience in origination, negotiation and structuring of new investment opportunities in mining, energy, and ESG.



## **Industry Report: Carbon / Emissions Sector**

- Mahesh Liyanage, CFO, is also the CFO at Inventa Capital. As a CPA with over 20 years of experience across diverse industries, he specializes in Canadian public company reporting and regulatory compliance, business spin-offs/mergers and acquisitions, treasury management, and Canadian and US tax compliance. Mr. Liyanage also has experience working with royalty companies as CFO for Orogen Royalties.
- Jamie Keech is Vida Carbon's Co-Founder and Executive Chairman. Mr. Keech is a Partner at Inventa Capital and the founder & CIO of Resource Insider, an investment research service providing high-net-worth investors exclusive research on opportunities in the natural resource sector.
- Craig Parry serves as a Director of the Company and is a Partner & Chairman at Inventa Capital. He is also the co-founder and senior advisor to NexGen Energy and the Chairman of Vizsla Silver and Skeena Resources. Mr. Perry has 20 years of experience in commodities, capital markets, financing and M&A.
- Michael Berends serves as a Senior Advisor. He brings with him vast experience in carbon pricing strategy, offset
  development and trading and has over 20 years of experience working in both compliance and voluntary carbon markets.
   Mr. Berends and ClearBlue Markets have executed thousands of carbon related transactions and are widely recognized
  as leaders in the market.



# **Important Information and Legal Disclosures**

This report may be distributed in the following states: nil. Otherwise, this report may only be distributed into those states with an institutional buyer state securities registration exemption.

### **Analyst Certification**

I, Colin Healey, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

### **Important Disclosures**

Of the companies included in the report the following Important Disclosures apply:

- As of the end of the month immediately preceding this publication either Haywood Securities, Inc., one of its subsidiaries, its officers or directors beneficially owned 1% or more of Altius Renewable Resources (ARR-T).
- Haywood Securities, Inc. has reviewed lead projects of Osisko Mining Corp. (OSK-T) and a portion of the expenses for this travel may have been reimbursed by the issuer.

## Distribution of Ratings (as of February 8, 2022)

			IB Clients
	%	#	(TTM)
Buy	83.7%	82	90.9%
Hold	5.1%	5	6.1%
Sell	0.0%	0	0.0%
Tender	1.0%	1	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	10.2%	10	3.0%

# Price Chart, Rating and Target Price History (as of February 8, 2022)



Source: Capital IQ and Haywood Securities

Link to Research Policy: <a href="http://haywood.com/what-we-offer/research/research-policy">http://haywood.com/what-we-offer/research/research-policy</a> Member of the Canadian Investor Protection Fund

