Emergent - messaging on LEAF value proposition to forest governments

June 2023

1. *What is LEAF?*

- The LEAF (Lowering Emissions by Accelerating Forest finance) Coalition is a public-private partnership dedicated to kick-starting a global market in high-integrity jurisdictional REDD+. LEAF is designed to accelerate climate action by facilitating voluntary carbon market transactions as a results-based finance mechanism for countries committed to protecting their tropical forests.
- Emergent serves as the coordinator of the Coalition and the intermediary through which buyers and sellers transact, bringing supply and demand together through a simple and independent platform for collective action between the public and private sectors. Emergent is an independent non-profit, allowing it to maximise impact and benefits for the environment and local communities.
- Since its launch at the White House Leaders Summit on Climate in April 2021, the LEAF Coalition has mobilized over $1 billion of forward purchase commitments from 25 major companies and three donor governments (Norway, UK and the US).
- To date 23 eligible proposals to provide carbon credits compliant with the high-integrity ART/TREES standard over the next five years have been received from tropical forest governments at national or sub-national level (referred to below as "jurisdictions"). Several additional jurisdictions are expected to submit proposals under a second submission window open in 2022, and LEAF will continue to welcome expressions of interest from new jurisdictions,
- The corporate LEAF participants are more than two dozen leading companies. All companies commit to rigorous demand-side integrity criteriaby ensuring that purchases of credits will be additional to – not in place of – ambitious action to reduce emissions within companies' own value chains:
    - committing to science-based decarbonization targets consistent with limiting warming in line with the long-term temperature goal of the Paris Agreement, with no or limited overshoot;
    - publicly committing to mid-century net zero targets covering all three scopes;
    - joining the UN Race to Zero;
    - publicly reporting a greenhouse gas emissions inventory following the Greenhouse Gas Protocol;
    - publicly reporting any use of emissions reductions or other carbon credits, including purpose of use. Reporting must be independently audited.

2. *What is ART-TREES?*

- The Architecture for REDD+ Transactions (ART) ART develops and administers standardized procedures for crediting emission reductions and removals from national and large sub-national REDD+ programs. ART is governed by a Board of globally recognized experts and operated by an independent secretariat hosted by Winrock International, a nonprofit organization that also runs the American Carbon Registry.

- ART has been designed to work in tandem with Emergent and was established in parallel with, but independently of, Emergent. Emergent currently only transacts credits certified through or approved by the ART framework.
- ART's standard for the measurement, monitoring, reporting and verification of emission reductions and removals from the forest sector – The REDD+ Environmental Excellence Standard, known as TREES – has been developed to generate the highest-quality carbon credits in the world to protect and restore tropical forests. Each credit represents a tonne of reduced CO_2 emissions or of CO_2 removed from the atmosphere.
- TREES was developed over several years with input from multiple stakeholder consultations. It builds on decades of lessons learned in results-based payments for forest protection. The standard reflects leading practice, in particular through:
    i. Rigorous adherence to social safeguards: ART/TREES is only standard to use and continuously monitor progress and conformance against the Cancun Safeguards – acknowledged as the most extensive measure of social safeguards.
    ii. Conservative baselines: Emission reductions are issued against recent historical deforestation baselines that are recalculated on a rolling five-year basis. The baseline can never go up, only down. This feature is designed to support increasing jurisdictional ambition to reduce deforestation, and greater buyer confidence that reductions can reasonably be said to be additional to what would otherwise have happened.
    iii. Nesting: Provision for inclusion of existing, government-approved carbon crediting projects within jurisdictional accounting frameworks.
- ART/TREES is designed to be uniquely appealing to jurisdictions and corporate buyers. For jurisdictions, the standard – in tandem with the price and transaction structures offered by LEAF (see below) - will unlock stable, long-term financial flows to protect and restore forests. For corporate buyers, ART/TREES enables reliable access for the first time to large volumes of high-integrity credits from large-scale forest programmes.

3. *How is LEAF bringing together supply and demand?*

- Emergent periodically issues calls for proposals from jurisdictions to supply credits. Any national or subnational (ie one level below national) jurisdictions with tropical and subtropical forests eligible for crediting under ART/TREES is encouraged to submit a proposal. Proposals are reviewed for Emergent by independent experts. (This is separate from ART's formal credit qualification process.)
- LEAF builds demand for these jurisdictions' credits by securing long-term offtake agreements from major corporations that meet its rigorous buyer criteria. LEAF buyers have collectively pledged to buy over 100m credits so far.
- LEAF participant buyers indicate jurisdiction(s) and credit volumes in which they have an interest, based on considerations such as vintages and transaction pathways. Emergent amalgamates these expressions of interest into indicative demand for specific jurisdictions, and uses them as the basis for negotiation of sale and purchase contracts with buyers and jurisdictions respectively.
- Purchase agreements are 'forward' contracts (see below). When credits are issued, they are bought from jurisdictions by Emergent and sold to purchasers, in accordance with the contract terms.

4. ***What happens if jurisdictions are unable to generate enough credits? Or any credits?***
   Any contract signed by Emergent with jurisdictions or credit buyer is 'unit contingent'. This means that they are only valid if jurisdictions qualify for ART/TREES and issue sufficient credits, protecting both buyers and jurisdictions. A shortfall is not considered an event of default.

5. ***What price is LEAF offering for TREES credits?***
   LEAF is offering $10 per credit purchased through 'forward' contracts (see below). This is the same 'bid' price communicated to jurisdictions in late 2021 and mid-2022 via LEAF's 'call for proposals'.

6. ***What's the market price for TREES credits?***
   - Only one transaction of ART TREES credits has taken place and they are not yet trading broadly in the voluntary carbon markets (VCM), so a benchmark price for them has yet to emerge.
   - Most price signals come from VCM 'spot' (as opposed to forward/option) markets, where producers can sell issued carbon credits through brokers or an exchange. This market is relatively illiquid and opaque and mostly trades project-based rather than jurisdictional credits. Prices can vary widely depending on market conditions, project types, and volume. Ecosystem Marketplace's 2022 survey indicated that recent pricing for REDD+ spot[1] transactions (generally based on smaller volumes than will be purchased through LEAF) averaged ~$5.80 per credit, an increase of 7% from 2021. However, prices have declined significantly in the first months of 2023.
   - Another possible indicator is CBL's N-GEO futures contract, which is based on a basket of 'nature-based' carbon credits. In September 2022 it was trading at ~$8.45/credit, declining from levels earlier in the year. This decline has continued into 2023, with prices softening for nature-based credits in particular.
   - Sovereign demand for jurisdictional REDD+ credits provides another source of information. The Forest Carbon Partnership Facility set a price of $5/credit for 2019-24 crediting years. Prices for BioCarbon Fund Initiative for Sustainable Forest Landscapes will emerge in the coming weeks. Prices for jurisdictional results-based payments under bilateral partnerships have ranged from $5-$10/credit.
   - The future price for jurisdictional credits is difficult to predict, and Emergent and LEAF do not seek to do so. Voluntary carbon markets are still nascent and subject to considerable uncertainty. Prices could be affected by large changes to supply or demand. For example, there is the potential for new and substantial influxes of supply from large jurisdictions which will have to be absorbed by the market. Demand-side uncertainties include the potential for significant growth as more companies adopt carbon neutrality and net zero targets, and the risk of lower demand in the event of an economic recession. LEAF is offering fixed-price forward contracts (see below) precisely to help jurisdictions navigate these uncertainties.

7. ***Can HJs get a higher price from LEAF?***
   - Emergent will communicate indicative demand volumes to jurisdictions, typically aggregated from several buyers, at the LEAF bid price of $10. If this is no longer an acceptable forward price to a jurisdiction, Emergent will discuss an alternate price with

[1] "Spot" transactions in this context refer to verified and issued carbon credits sold on the open market at prevailing prices. "Forward" transactions are for as-yet unissued credits.

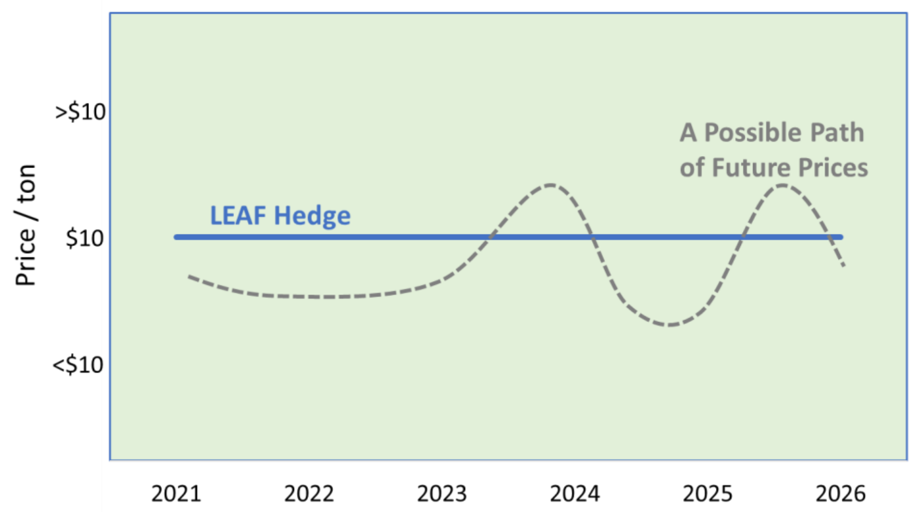
the jurisdictional team and communicate it to LEAF buyers. Indicative volumes offered to jurisdictions may be reduced partially or entirely depending on buyers' reactions.

- In addition to defined-price forwards, LEAF intends to offer jurisdictions the opportunity to make a proportion of their volumes per vintage available to qualified buyers via an auction or similar mechanism such as an online exchange. Such sales would be made from the pool of credits purchased by LEAF sovereign donor participants. The proportion of sovereign credits that would be auctioned would be agreed in the context of any credit delivery shortfall, which sovereign credits are also intended to provide a buffer against. Credits remaining in the sovereign pool will be sold once issued, and so be dealt with outside the core LEAF forward purchase agreements. This would serve as both a 'price discovery' mechanism for jurisdictions and an opportunity for them to benefit from higher prices <u>if available</u> on the open market. To protect jurisdictions from potential price downside, credits sold via an auction or similar mechanism will have a floor price of $10, underwritten by LEAF's sovereign participants (currently UK, Norway and US). Any price upside above $10, net of third party fees, resulting from the re-sale will be passed onto jurisdictions.

8. What transaction structures is LEAF offering HJs?

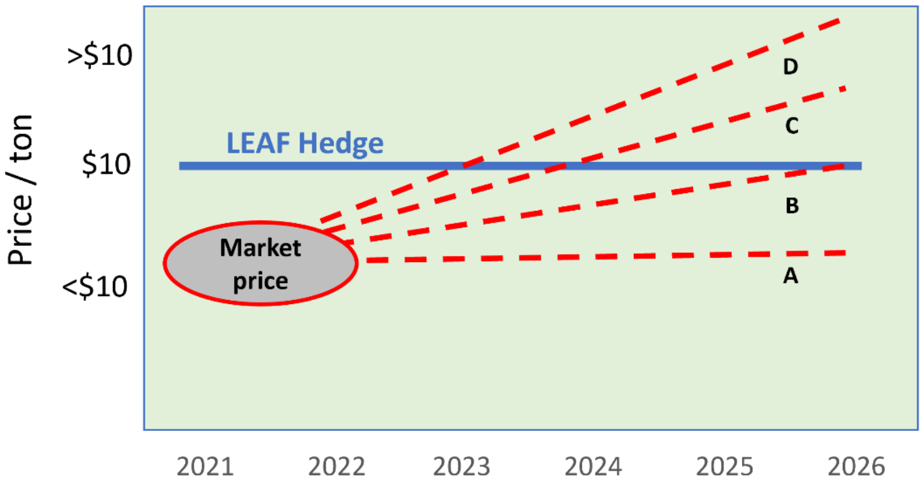
- Emergent will transact through Emissions Reduction Purchase Agreements (ERPAs) structured as 'forward' contracts. When a jurisdiction agrees a forward ERPA with Emergent, it locks in an agreed price for a specified volume of credits over a defined period (typically, 2022-26 credit vintages). Subject to the provision that the jurisdiction will only be able to sell credits to the extent its deforestation commitments are achieved and verified by ART the forward transaction allows the jurisdiction to 'hedge' against market volatility by locking in price and volume commitments and therefore securing a substantial fixed and predictable revenue stream in scenarios where market prices fluctuate below that fixed price. Many jurisdictions are making significant investments to comply with ART/TREES and in that context a stable source of revenue can be an important consideration.
- "Hedging" means that the jurisdiction is better protected against downside in prices but also gives up its potential upside in the event that the market rises above the fixed price. Figure A, below, illustrates this.

Figure A: LEAF Hedge vs Possible Market Prices



- This simple example shows how a choice to enter a fixed price contract differs from a decision to sell at “spot”, ie selling credits into the market at whatever price is available at the time of sale. This price may be higher or lower than the fixed hedge price offered by LEAF today.
- To further illustrate this point, consider a set of possible scenarios for a jurisdiction that achieves a verified issuance volume of 1.5 million credits (ie 1.5m tons) from credit vintages 2022-26, ie 300k credits/ annum. The jurisdiction decides to commit one million credits of this volume (200k credits/annum) to LEAF’s at the Coalition’s bid price of $10. This will lock in $10m over five years, a sum immune to market price fluctuations. (In this hypothetical example, the jurisdiction decides to sell the remaining 500k credits on a spot basis, ie at whatever level can be achieved in the market each year.) Figure B, below, sets out four price scenarios for the hedged one million credits. In these scenarios, the jurisdiction achieves a higher revenue from hedging if the market is flat (Scenario A) or rises to $10 (Scenario B). The jurisdiction will break even in Scenario C and receive slightly less revenue than it would have got from the market price in Scenario D. Note that this is not a real loss, but an 'opportunity cost’ of foregone revenue from sales it could otherwise have made.

Figure B: LEAF Hedge in hypothetical price scenarios



Scenario	Starting Price	Ending Price	HJ Proceeds from LEAF Hedge
A.	<$10	<$10	>>Market
B.	<$10	$10	>Market
C.	<$10	>$10	=Market
D.	<$10	>>$10	<Market

9. Are HJs being asked to transact all their volumes through LEAF?

- No. At present, we encourage jurisdictions to offer LEAF only the volumes for vintages 2022 through 2026 that they are willing to lock in at a fixed price, in the context of their overall ER portfolio and their risk management strategy.
- Some jurisdictions may look to hedge all or most of their anticipated credits through LEAF to achieve a higher level of certainty. Others may wish to keep some credits

unhedged for sale on the open market in order to take advantage of prices if they rise. This may be useful from both a political and economic standpoint. This 'partial hedging' approach is common in commodity markets and can help guard against 'regret risk' in the event that future prices turn out to be very strong (per scenario D, above).

10. *Will LEAF offer other contractual structures and routes to market for HJs*?

- The LEAF Coalition is focused on executing under the first two calls for proposals. Within this framework, in addition to fixed-price forwards, the sovereign contributors in LEAF are offering to sell a proportion of jurisdictions' credits via auction or similar mechanism (see above).
- Looking to the future, Emergent is also investigating other structures to provide jurisdictions with more options to manage their portfolio of credits as the carbon markets evolve. In particular, Emergent could support sales of jurisdictional credits on 'spot' markets. We welcome discussions with our jurisdictional partners on these topics.

11. *Will LEAF offer other support to HJs, such as pre-financing or technical assistance to help qualify for ART/TREES?*

- Emergent intends to establish a philanthropically-funded facility able to make selective advance payments to jurisdictions in some circumstances. At the time of writing, this facility is in the design and fundraising stage. We welcome discussions on this topic with our jurisdictional partners.
- At the time of writing, LEAF does not plan to make technical assistance grants. LEAF is focused on aggregating supply and demand for jurisdictional REDD+ carbon credit transactions, and as such participants believe the Coalition is not as well placed as other organisations and agencies to offer pre-financing or technical assistance.
- Sovereign donors are providing technical assistance for REDD+ readiness through existing technical assistance programmes and will continue to work closely with other organisations to identify additional routes to providing technical support, where needed.