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Authored by Efficiency Professor Consultancy

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PART I

The Quantitative Growth Thesis

Authored by Efficiency Professor Consultancy

§ 01 Executive Summary

This paper sets out a structural argument that has shaped Efficiency Professor Consultancy's work across litigation finance, sovereign natural-capital finance, and industrial circular-economy finance. The argument runs in six movements.

- **First** — the credit-on-existing-assets growth model that has dominated financial markets since the 1970s is structurally exhausted. Quantitative Easing expands the money supply against existing assets. Mortgage-Backed Securities operate as a private-sector continuation of the same dilutive mechanism, expanding credit against an existing housing stock that grows much more slowly than the credit secured against it. Auto-loan ABS, credit-card ABS, and student-loan ABS extend the pattern across adjacent consumer asset classes. Each layer dilutes the underlying asset base; none expands it. The model requires continually rising earnings, valuations, and asset prices to sustain its servicing cost — and 2008 was the first demonstration that the arithmetic limit is reachable.
- **Second** — the inversion is structural, not theoretical. The same securitisation infrastructure that delivers QE-equivalent dilution under MBS — bankruptcy-remote SPV architecture, senior/junior tranching, overcollateralisation, ATE / credit-enhancement mechanics, institutional secondary-market placement — works identically when applied to underlying assets that build new productive base rather than re-pricing existing stock. Capital-pool-funded RWA ABS uses the identical machinery. The senior tranche is institutional-grade and gilt-edged. What is different is the underlying: each issuance places senior-tranche proceeds into a capital pool that funds programmes producing new physical, biological, or industrial asset base. Same machinery. Inverse economic effect. The transition from MBS-as-QE to RWA-ABS-as-QG requires no new financial-engineering capability. It requires deployment of existing infrastructure against underlying assets that expand rather than dilute.
- **Third** — the four AiGLE-graded asset classes are the available implementation. LBS recovers wrongfully extracted capital and returns it to consumer balance sheets. CBS preserves natural capital and stacks monetisation across biodiversity, ecosystem services, water credits, and carbon. FBS expands the productive forest base and stacks revenue across timber, carbon, biodiversity, and ecosystem services. MSWBS converts municipal solid waste into industrial input and recovers materials that would otherwise leave the economic system. Each is QG by construction. Each operates through the same securitisation machinery as MBS but with inverse economic effect.
- **Fourth** — the scale opportunity is asymmetric and that asymmetry is structural. The sovereign capital-pool family — CBS, FBS, MSWBS — is trillion-scale across the OECD over a decade: MSWBS at full TAM scales toward approximately \$500bn in the US alone; sovereign CBS and FBS scale across the OECD natural-capital base at a multiple of that; combined sovereign wealth fund formation occurs through the capital-pool corpus at every issuance. This is the door-opener for the conversation with national treasuries, sovereign wealth funds, and central-bank reserve managers. LBS is billion-scale rather than trillion-scale — bounded by the size of historical wrongful-extraction events that produce the underlying claim universe — but with disproportionately large economic-stimulus effect through high-velocity consumer redistribution.

The two complement each other rather than competing: trillion-scale sovereign building blocks plus billion-scale operative consumer demonstration.

- **Fifth** — the instrument that makes Quantitative Growth institutional is the capital-pool-funded senior tranche, with the credit profile and capital treatment determined by issuer class. CBS and FBS are sovereign-issued or sovereign-guaranteed by construction; MSWBS varies by issuer class (federal, state, municipal-revenue, or corporate — see Part II §07); LBS is SPV-issued with ATE-insurer credit enhancement. Where the issuance carries a sovereign or sovereign-equivalent guarantee under the conditions of §13, the senior tranche qualifies for Basel III HQLA Level 1 / 0% risk-weight capital treatment. The structural innovation is the capital-pool form (Part II §09); the AiGLE-graded Real-World Asset securitisation family is the available implementation.
- **Sixth** — the grading infrastructure is operational. AiGLE is the analytical authority for the family. AAA credit grades, QG profiles, ESG/SDG mappings, and Basel III HQLA L1 / 0% RW positioning are already published criteria. The LBS portfolio is operative — five live AAA-graded certificates as at the date of this paper; CBS and FBS sovereign mandates are in preparation; MSWBS is demonstrated through the Carbotura worked example in Part IV. The infrastructure to deploy institutional capital at scale into RWA ABS is in place. The constraint is institutional adoption.

THE CORE ARGUMENT

The financial system has spent fifty years optimising the financing of existing assets – and has run out of room to do more of that profitably without compounding fragility. The same securitisation infrastructure that delivers that dilution can be turned, with no change to the financial machinery, into the delivery vehicle for accretive QG asset-base expansion through capital-pool-funded RWA ABS.

For sovereigns: trillion-scale national asset-base expansion across CBS, FBS, MSWBS over a decade, with sovereign wealth fund formation as a structural by-product. For consumers: billion-scale wealth restoration through LBS with disproportionately large stimulus effect. The grading infrastructure exists. The Carbotura worked example demonstrates the apparatus is operative. This paper argues that the alternative is no longer a long-term aspiration. It is the available response to a structural problem that is now visible on every major balance sheet.

§ 02 The MBS Problem and the Inversion

The Mortgage-Backed Security is the canonical instrument of the credit-on-existing-assets era. The wider securitisation complex — auto-loan ABS, credit-card ABS, student-loan ABS, leveraged-loan CLOs — extends the same structural pattern into adjacent asset classes. The argument of this paper

turns on a single observation about that pattern: MBS, considered structurally rather than instrumentally, operates as a private-sector continuation of Quantitative Easing. Both expand nominal claims against an existing asset base without expanding the asset base itself. Both are dilutive. The structural similarity is what makes the ABS Factory inversion thesis powerful — because the same securitisation infrastructure that delivers QE-equivalent dilution under MBS can be turned, with no change to the financial machinery, into the delivery vehicle for QG-accretive asset-base expansion under capital-pool-funded RWA ABS. The problem and the solution share an architecture. The economics are inverse.

Why MBS is structurally a private-sector continuation of QE

Quantitative Easing operates through central-bank purchase of existing financial assets — Treasuries, agency MBS, corporate credit — at prices that support secondary-market liquidity. The mechanism expands the central-bank balance sheet against assets that already exist; it does not finance the construction of new productive capacity. The economic effect is dilution of the unit value of the currency, accompanied by asset-price support across the financial complex. This is well-documented and not in dispute.

MBS is structurally similar at the private-sector level. The MBS securitisation pool aggregates mortgages secured against existing residential properties; the senior tranche is sized at the present value of contractual mortgage cashflows. The MBS does not, in any meaningful aggregate sense, finance the construction of new housing — that role belongs to construction lending, which is a small fraction of the securitisation market. The MBS finances the re-pricing of existing housing stock through mortgage origination secured against properties that already exist. Each refinancing cycle expands the credit balance against the same physical asset; the asset must rise in price to support the higher credit balance; the rising price requires consumer earnings to grow in step or the servicing cost becomes unsustainable. The structure is dilutive of the housing asset base in exactly the way QE is dilutive of the currency: nominal claims rise faster than the underlying real asset, and the difference is closed by repricing rather than by real expansion.

The continuum becomes literal at the central-bank balance sheet. The Federal Reserve's MBS holdings reached approximately \$2.4 trillion at the 2022 peak — central-bank absorption of private-sector MBS issuance because the boundary between MBS and QE had become structurally indistinct. Bank of England, ECB, Bank of Japan, and Bank of Canada hold analogous positions in their domestic equivalents. The combined effect is that MBS issuance and QE programmes operate as a single dilutive complex: private-sector origination expands credit against existing housing; secondary-market institutional placement absorbs the issuance; central-bank asset-purchase programmes absorb the residual. Each layer is rational at its own level. The aggregate effect is monetary expansion against a fixed asset base — QE by another name.

THE STRUCTURAL DISTORTION – US MBS COMPLEX

Housing stock (×1.8)	1970 → 2025:	~80m → ~145m units	
Mortgage debt	1970 → 2025:	~\$300bn → >\$13 trillion	(×43)
Real house prices nominal, ~×3 real)	1970 → 2024:	index ~25 → ~280	(×11)
House-price-to-income (consumer carrying cost up)		2.3× → 5.5×	
Fed MBS holdings (central-bank absorption)	peak 2022:	~\$2.4 trillion	

The asset base grew modestly. The credit secured against it grew an order of magnitude faster.

The dilution is structural, not accidental – and it is, in economic effect, QE delivered through private-sector securitisation channels.

The pattern across the wider securitisation complex

The MBS pattern recurs across every major securitisation asset class. Each instrument finances a higher credit balance against an asset base that grows more slowly than the credit secured against it. The mechanism is identical; the underlying assets vary.

- **Auto-loan ABS.** Average new-vehicle loan size in the US grew from approximately \$14,000 in 2000 to over \$42,000 by 2024 — a tripling. Average vehicle price over the same period rose by approximately 70%. The gap was closed by lengthening loan tenor (60-month standard became 72-month; 84-month products are now common) and by extending credit further into sub-prime populations.
- **Credit-card ABS.** US credit-card balances outstanding grew from approximately \$400bn in 2000 to over \$1.2 trillion by 2024. The underlying consumer purchasing power did not grow at the same rate; the difference was financed by rolling balance and structurally rising interest charges.
- **Student-loan ABS.** US student-loan debt outstanding grew from approximately \$200bn in 2003 to over \$1.7 trillion by 2024. The underlying asset — human capital and earnings potential — grew at a much slower rate; the gap is now visible in default rates, deferrals, and the political pressure for federal forgiveness.
- **Government debt.** US federal debt outstanding grew from approximately \$5.6 trillion in 2000 to over \$34 trillion by 2024 — a sixfold increase. Underlying GDP grew by approximately 2.6× over the same period. The gap is closed by quantitative easing — direct central-bank purchase of the resulting debt — and by reliance on continued reserve-currency status to absorb the issuance.

Stablecoin reserve composition is now a meaningful component of marginal demand for short-dated Treasuries; this is discussed in Part V §24.

The 2008 demonstration and what it confirmed

The structural condition described above is what produced the 2008 financial crisis. Sub-prime mortgage origination expanded the credit base further into populations whose earnings could not support standard mortgage servicing under any plausible asset-price scenario; the resulting MBS pools were structured with senior tranches that depended on continued asset-price appreciation to remain investment-grade; when asset prices stopped appreciating in 2007, the structure repriced rapidly downward. The nominal causes — poor underwriting, rating-agency failure — were real but downstream. The structural cause was that the MBS market had run out of room to finance the same housing stock at higher prices and was reaching ever further into populations that could not support the resulting servicing cost.

The policy response — TARP, the first round of QE, the regulatory expansion of dealer balance sheets — addressed the symptoms by absorbing the dilutive credit stack onto the central-bank balance sheet. None of it addressed the structural cause. In the seventeen years since, the system has continued to layer credit on the same asset base, and the central-bank absorption mechanism has been institutionalised as a permanent backstop. Mortgage debt outstanding has more than doubled from the 2008 level. The collateralised loan obligation market has scaled to over \$1.4 trillion. The aggregate effect is that more credit sits against a slowly-growing real asset base than at any point in financial history, with the carrying cost falling disproportionately on consumer earnings and on government balance sheets. The model has not been corrected. It has been extended — and central-bank balance-sheet absorption has been normalised as the residual mechanism.

The Inversion — same machinery, opposite economics

This is the load-bearing point of the paper. The securitisation infrastructure that has delivered QE-equivalent dilution under MBS — bankruptcy-remote SPV architecture, senior/junior tranching, overcollateralisation, ATE / credit-enhancement mechanics, institutional secondary-market placement — works identically when applied to underlying assets that expand the productive base rather than re-pricing it. The change required is not financial engineering. The financial engineering is mature, tested, and rated. The change required is in what the senior tranche finances: re-priced existing assets, or constructed new asset base.

Capital-pool-funded RWA ABS — CBS, FBS, MSWBS — uses the identical securitisation machinery as MBS. The senior tranche is institutional-grade by construction; capital treatment varies by issuer class, with sovereign-issued or sovereign-equivalent-guaranteed structures qualifying for Basel III HQLA Level 1 treatment under the conditions of §13. The mechanics of issuance, placement, secondary-market trading, and central-bank repo eligibility (where applicable) are unchanged from conventional ABS. What is different is the underlying. Each issuance places senior-tranche proceeds into a capital

pool that funds the operation of programmes producing new physical, biological, or industrial asset base — conserved natural capital, growing forests, recovered raw materials. The same securitisation that dilutes the housing asset base under MBS expands the productive base under RWA ABS. Same machinery. Inverse economic effect.

THE INVERSION THESIS

QE → Central-bank balance-sheet expansion against existing assets.
Dilutive of currency. Asset-price support. Permanent.

MBS → Private-sector credit expansion against existing housing stock.
Dilutive of housing asset base. Operates as private-sector QE through identical structural mechanics. Central-bank balance-sheet absorbs the residual.

RWA ABS → Same securitisation infrastructure as MBS. Capital pool-funded senior tranches.
Underlying programmes build new physical, biological, or industrial asset base.
Accretive of productive base. Operates as Quantitative Growth through identical structural mechanics. No central-bank balance-sheet absorption required.

The financial machinery is the same. The economic effect is inverse. The transition from MBS-as-QE to RWA-ABS-as-QG requires no new financial-engineering capability — it requires deployment of existing securitisation infrastructure against underlying assets that expand rather than dilute.

Scale framing — what the inversion delivers

The scale opportunity is asymmetric across the four AiGLE-graded asset classes, in a way that matters for how the inversion is positioned to different counterparty classes. The sovereign capital-pool family — CBS, FBS, MSWBS — is trillion-scale across the OECD over a decade. Litigation-Backed Securities (LBS) is billion-scale, but with disproportionately large economic-stimulus effect through high-velocity consumer redistribution. Both matter. They serve different parts of the institutional adoption thesis.

- Trillion-scale: sovereign capital-pool ABS.** MSWBS at full TAM in the US alone scales toward approximately \$500bn cumulative issuance across roughly 5,000 facilities. Sovereign FBS and CBS scale across the OECD natural-capital base at a multiple of that — every OECD sovereign with significant national forest, conservation programme, or biodiversity commitment is a potential CBS / FBS issuer at \$1–2bn benchmark per programme, with multiple programmes per sovereign over the issuance pipeline. Aggregate trillion-scale across the OECD over a decade is the realistic positioning. Combined with the sovereign wealth fund formation that occurs at every issuance through the capital-pool corpus, this is structurally the largest sovereign-finance opportunity since the post-war period — and is the door-opener for the conversation with national treasuries, sovereign wealth funds, and central-bank reserve managers.
- Billion-scale with multiplier: LBS.** Litigation-Backed Securities are bounded by the size of the historical wrongful-extraction events that produce the underlying claim universe — UK PPI redress reached approximately £40bn cumulative across 15 years; UK motor finance redress under FCA review is estimated at £9–18bn; energy commission claims and irresponsible lending claim universes sit in the low billions each. The financing scale is genuinely smaller than the sovereign family. The economic-stimulus effect is disproportionately large, however, because the redistribution operates at the consumer end of the economy where the multiplier is highest — recovered capital clears debt, restores credit access, and re-enters retail spending and deposit channels at high velocity. LBS is the social-justice and consumer-stimulus component of the QG thesis, not the financing-scale component.

WHAT THE INVERSION DELIVERS

<p>Trillions for sovereigns expansion at</p> <p>sovereign wealth fund</p> <p>financing tool</p> <p>dilution and without</p> <p>Door-opener for</p> <p>finance ministries.</p>	<p>CBS, FBS, MSWBS deliver national asset-base institutional scale, with capital-pool formation as a structural by-product. The that deploys without further currency further sovereign balance-sheet expansion.</p> <p>the conversation with treasuries and</p>
<p>Billions with multiplier restoration to consumer</p> <p>financing terms but</p>	<p>LBS delivers high-velocity wealth balance sheets. Smaller in absolute</p>

disproportionately large in economic-stimulus effect.

Operative now – five live AAA-graded certificates – and the proof-of-concept that the AiGLE-graded structured loan-note machinery delivers AAA on real cashflow.

Together these constitute the deployment story for the QG inversion. Sovereign-scale building blocks for trillion-dollar national asset-base expansion. Consumer-scale operative proof of the machinery. Both required; neither sufficient on its own.

§ 03 Credit on Existing Assets — The Structural Cycle

The MBS pattern set out in §02 is one expression of a more general structural cycle. The cycle has six visible stages, repeated across different asset classes and at different scales over the past five decades. Setting it out explicitly clarifies why each round of policy intervention has bought time without producing structural change.

The six-stage cycle

- **Stage 1 — Asset identification.** An asset class is identified that has stable cashflow characteristics suitable for institutional placement. Mortgages in the 1970s; auto loans in the 1980s; credit-card receivables in the 1990s; CLOs in the 2000s; consumer instalment receivables in the 2010s; private credit in the 2020s. Each cycle starts with a real economic asset that genuinely supports institutional capital deployment.
- **Stage 2 — Securitisation infrastructure.** SPV architecture, tranching, overcollateralisation, credit enhancement, and rating agency methodology are developed for the asset class. Institutional capital deploys at scale; spreads tighten; the asset class becomes a recognised holding for pension funds, insurance general accounts, and bank treasury books.
- **Stage 3 — Origination expansion.** Spreads attract competing originators. Origination volumes scale beyond the natural rate of growth in the underlying asset base. Pricing power passes from originators to securitisation desks; underwriting standards face pressure to relax to maintain origination volume.

- **Stage 4 — Underwriting drift.** Underwriting standards relax to sustain origination volumes against the slower-growing real asset base. Sub-prime expansion in mortgages 2003–2007; deep sub-prime auto lending 2015–2019; covenant-lite leveraged loans 2017–present. Each represents reaching further into populations or asset categories that cannot support standard underwriting.
- **Stage 5 — Stress event.** Asset-price appreciation, consumer-earnings growth, or central-bank support — the variables that close the gap between credit growth and asset-base growth — pause or reverse. The marginal originated paper underperforms; rating agencies downgrade; secondary-market liquidity contracts; senior tranches reprice. Mortgage 2007–2008; energy high-yield 2014–2016; consumer credit 2020 (briefly); regional banking 2023; commercial real estate 2023–present.
- **Stage 6 — Policy intervention.** Central banks and treasuries deploy balance-sheet support to absorb stress losses, restore secondary-market liquidity, and maintain confidence in the structural framework. The asset class survives in modified form; the structural pattern continues; a new asset class enters Stage 1, often funded by the very capital displaced from the stressed prior asset class.

WHY THE CYCLE PERSISTS

The cycle persists because each stage is rational from the perspective of the participants. Originators seek volume. Securitisation desks seek deals. Rating agencies seek issuer engagement. Investors seek yield over benchmark risk-free. Central banks prevent systemic crisis. No participant has a structural incentive to refuse a deal that prices well against current credit metrics, even when the aggregate effect is to layer more credit against an asset base that is not growing fast enough to support it.

The cycle does not break from within. It can only be displaced by an alternative structural form – one that deploys capital into asset-base expansion rather than asset-base re-pricing. That is what Quantitative Growth proposes.

The four principal failure modes

The credit-on-existing-assets model has four principal failure modes, each visible in the historical record. Each mode is a different way of expressing the underlying arithmetic problem: more credit chasing a slowly-growing asset base.

- **Acute repricing.** An exogenous shock prevents the asset-price appreciation required to support the credit stack. 2007–2008 mortgage repricing; 2020 corporate-credit repricing during the pandemic peak; 2022–2023 long-duration fixed-income repricing. The senior tranche of the affected asset class moves from investment-grade to distressed in months.

- **Chronic burden.** Where the gap between credit growth and asset-base growth widens slowly over years rather than reversing acutely, consumer earnings absorb increasing servicing burden. US household debt-service-to-income at 9.6% in 2024 against a long-term average closer to 7%. Consumer financial fragility increases without producing a discrete crisis event; political pressure for forgiveness, modification, or moratoria builds.
- **Sovereign absorption.** Where central banks intervene to prevent acute repricing, the credit stack moves onto the sovereign balance sheet. Federal Reserve total assets grew from \$0.9 trillion in 2008 to \$7 trillion by 2024 — predominantly through MBS, Treasury, and emergency-facility absorption of credit that the private market could not hold at par. The absorption transfers the structural problem from the credit market to the sovereign.
- **Currency dilution.** Where sovereign absorption is accompanied by aggregate monetary-supply expansion, the cost of the credit stack is socialised through the currency rather than through any specific debtor. M2 monetary supply growth has materially outpaced real economic growth across the major reserve-currency economies for the past two decades. The structural cost is paid by holders of the currency through reduced purchasing power; the burden falls disproportionately on cash-savers and fixed-income earners.

THE MEANING OF THESE FAILURE MODES

Each failure mode is a different way the system absorbs the arithmetic mismatch between credit growth and asset-base growth. None of them resolves the mismatch. They distribute it differently across different stakeholders — borrowers, savers, taxpayers, currency holders. The structural problem persists regardless of which failure mode dominates in any given decade. Quantitative Growth proposes to address the mismatch directly by expanding the asset base rather than re-distributing the cost of failing to do so.

§ 04 The Quantitative Growth Response

Quantitative Growth is the deployment of capital into Real-World Assets that build economic value through processing, financing, and trading. The contrast with Quantitative Easing is structural and important. QE expands the money supply against existing assets, with the explicit policy intent of supporting asset prices and, through them, consumer balance sheets and bank reserves. QG expands the productive asset base directly, with capital deployed into projects, programmes, and processes that produce new economic value. QE re-prices what already exists. QG builds what does not yet exist.

The four QG mechanisms

Real-World Asset deployment occurs through four structurally distinct mechanisms, each addressing a different category of unproductive or wrongfully-extracted capital. The four AiGLE-graded asset classes — LBS, CBS, FBS, MSWBS — map directly onto these mechanisms.

- **Wealth redistribution and monetary velocity.** Capital recovered from financial institutions through litigation returns to consumer balance sheets, where it clears existing debt, restores credit access, and re-enters the productive economy through retail spending and deposit channels. The redistribution itself is a high-velocity QG event: capital moves from low-velocity bank balance sheet to high-velocity consumer economy and returns to the system through deposit and consumption flows. This is the LBS mechanism.
- **Asset preservation and stacked monetisation.** Capital deployed into conservation programmes generates economic value through three compounding channels: direct cashflow from biodiversity units, ecosystem fees, and water credits; indirect value from carbon sequestration that monetises through stacked credit issuance; and brand-balance-sheet recognition where corporate offtake under SDG-linked or biodiversity commitments registers as recognised intangible asset on the offtaker's books. The underlying natural capital is preserved indefinitely. This is the CBS mechanism.
- **Biological growth and multi-stream stacking.** Capital deployed into forestry programmes funds silvicultural operations across the rotation, enabling biological growth that compounds without further capital input. The forest enters the economy multiple times — as standing-forest carbon, as harvested timber, as engineered wood product, as construction material, as employment, as tax base. This is the FBS mechanism.
- **Industrial conversion and circular-economy deployment.** Capital deployed into industrial waste-to-resource conversion captures the spread between disposal cost (negative value) and recovered raw material (positive value). Each tonne of municipal solid waste enters the economy multiple times: as gate-fee revenue, as recovered metals/polymers/CO₂/hydrogen credit/fertiliser feedstock, as municipal disposal cost saving, as state-level diversion-mandate compliance, as employment, as tax base. This is the MSWBS mechanism.

FOUR MECHANISMS, ONE THESIS

Each mechanism addresses a different category of unproductive or wrongfully-extracted capital. LBS recovers capital extracted through inadequate disclosure, undisclosed commission, or unfair lending practice and returns it to consumer balance sheets. CBS preserves natural capital that would otherwise be depleted and monetises ecosystem services that would otherwise be unpriced. FBS expands the productive forest base and stacks revenue across timber, carbon, and ecosystem services. MSWBS converts disposal cost into industrial input and removes material from landfill. Each is QG. Together they constitute the operative response to the credit-on-existing-assets cycle.

Why QG is structurally different from QE

Quantitative Easing operates through monetary aggregates. Central-bank balance-sheet expansion purchases existing financial assets — Treasuries, MBS, corporate credit — at prices that support secondary-market liquidity and prevent acute repricing events. The mechanism is well-understood

and effective at short-term stabilisation. It is structurally limited by two factors: it does not expand the real asset base, and it transfers credit risk from the private sector to the central-bank balance sheet without retiring it.

Quantitative Growth operates through real-economy deployment. Capital placed into the AiGLE-graded ABS Factory, structured through capital-pool senior tranches, finances Real-World Asset programmes that produce new economic value over the tenor of the instrument. The mechanism is tested at scale (the AiGLE LBS portfolio is operational; sovereign CBS and FBS structures are in mandate negotiation; MSWBS is demonstrated through Carbotura). It is structurally distinguished from QE by two features: it expands the real asset base, and it produces returns from genuine economic activity rather than from monetary expansion against existing assets.

QE vs QG – THE STRUCTURAL DIFFERENCE

QE → Central-bank purchase of existing financial assets. Monetary aggregate expansion.

Asset-price support. Credit-risk transfer to sovereign balance sheet.

Structurally limited by inflation, currency dilution, and balance-sheet capacity.

QG → Institutional capital deployment into Real-World Asset programmes via

AiGLE-graded ABS Factory senior tranches. Asset-base expansion. Returns from

genuine economic activity. Capital-pool corpus governance keeps the structure

transparent and surveyable. No central-bank balance-sheet absorption required.

§ 05 The ABS Factory — Deployment Mechanism

The mechanism through which Quantitative Growth deploys at institutional scale is the ABS Factory: long-duration cashflow + investment-grade counterparty + capital pool + securitisation + bookrunner programme + commodities-trade book. The Factory produces four asset classes at present, each sharing a common structural pattern with adaptations specific to the underlying asset. The structural pattern is set out in detail in Part II §09; the brief description here positions the Factory as the operative response to the structural problem set out in §02 and §03.

The five Factory components

- **Long-duration cashflow.** Each AiGLE-graded asset class has cashflow characteristics that support multi-year senior-tranche issuance — litigation portfolios over 5-year LBS tenor; perpetual conservation programmes over 30–50 year CBS tenor; forestry rotations over 15–80 year FBS tenor; municipal Offtake Agreements plus output-stream cashflow over 10–15 year MSWBS amortising tenor. Long duration is the structural property that distinguishes Real-World Asset cashflow from short-tenor receivables.
- **Investment-grade counterparty.** LBS counterparties are major banks and investment-grade insurance counterparties (defendants and ATE insurers). CBS and FBS counterparties are OECD-qualifying sovereigns. MSWBS counterparties are Aaa-A rated municipal credits anchored by statutory diversion mandates. Each asset class delivers institutional-grade counterparty credit on the input side, which is the foundation of the senior-tranche credit profile.
- **Capital pool.** The structural innovation. Senior-tranche proceeds are placed into a capital pool corpus invested in capital-markets instruments under a published Mandate (AiGLE Criteria Paper No. 3); programme operations are funded annually from corpus returns; senior coupon is serviced from programme cashflows over the tenor; corpus is preserved for the life of the structure. The capital-pool form supports gilt-equivalent senior-tranche treatment under Basel III where the issuance carries a sovereign or sovereign-equivalent guarantee under the conditions of §13.
- **Securitisation.** Bankruptcy-remote SPV architecture, senior/junior tranching, ringfenced collection accounts, sponsor risk-retention under 17 CFR Part 246, trustee oversight. Standard ABS infrastructure adapted to the multi-decade tenor and the capital-pool corpus.
- **Bookrunner programme + commodities-trade book.** Each asset class generates a programmatic issuance pipeline (LBS by claim genre; CBS and FBS by sovereign and programme; MSWBS by metropolitan roll-out). Output-stream commodity revenue (timber for FBS, recovered raw materials for MSWBS, biodiversity and ecosystem credits for CBS) generates a parallel commodities-trade book that contributes additional NIM to the Factory operator. The bookrunner economics support the Factory at scale.

What the Factory delivers

The ABS Factory delivers four institutional outcomes that the credit-on-existing-assets model cannot deliver. First, asset-base expansion at scale — every AiGLE-graded RWA ABS issuance creates new productive asset base, in contrast to MBS issuance which finances re-pricing of existing housing stock. Second, sovereign-equivalent capital treatment under Basel III HQLA Level 1 / 0% RW for CBS and FBS by construction, and for MSWBS where the issuance carries a federal or sovereign-equivalent guarantee under the conditions of §13 (see Part II §07 for the MSWBS issuer-class taxonomy). Third, sovereign wealth fund formation at every CBS or FBS issuance through the capital-pool corpus — sovereigns develop or expand managed asset books at \$1–2bn per benchmark issuance, multiplied across the issuance programme. Fourth, ESG/SDG mandate alignment by construction — each asset class lands in a defined ESG pillar (Social for LBS; Environmental across biodiversity, climate, and

circular economy for CBS, FBS, MSWBS) with a mapped SDG cluster, opening institutional capital flows that are explicitly mandated to ESG/SDG allocation.

Why the form matters — traditional finance vs ABS Factory finance

There is a counter-argument that should be addressed directly. Each of the underlying programmes — MSW facility construction, sovereign forestry, conservation initiatives, litigation portfolios — could in principle be financed through traditional forms: project finance for facility construction, sovereign lending for forestry programmes, philanthropic or development-finance structures for conservation, single-case or fund-vehicle structures for litigation. The capital would deploy. The programmes would run. So why the ABS Factory?

The answer is that traditional financing forms produce closed transactions. A bank originates the deal, takes origination fees, holds or syndicates the resulting credit exposure, and ends. The financing is one-time and the institutional position with the counterparty does not compound. The ABS Factory form produces something structurally different. It builds standing financial infrastructure: a graded asset class with secondary-market depth, a repeatable issuance pipeline, a captive sovereign-wealth-fund corpus, and Basel III HQLA-eligible senior tranches. Each issuance compounds the institutional position; the franchise grows; subsequent issuances become more efficient because the asset class itself is more deeply established. This is asset-class formation, not project lending.

The institutional consequence is that the same underlying transaction generates materially more revenue streams under the ABS Factory form than under traditional financing. The table below sets out the comparison. It is illustrative — actual fee economics vary by jurisdiction, programme, and transaction structure — but the structural point is durable: the ABS Factory form captures revenue across project-finance economics and ABS economics simultaneously, while traditional forms capture only one or the other.

REVENUE STREAM	TRADITIONAL FORM	ABS FACTORY FORM
Bookrunner / structuring fees	Limited — fee on syndicated loan or sovereign bond at issuance only.	Senior MSWBS / CBS / FBS tranche bookrunner. Programmatic across issuance pipeline. Recurring annually per sovereign.
Construction-loan NIM	Captured under direct project-finance facility but exposes bank balance sheet to construction-phase performance risk.	Originated from ABS Factory stacked lending book. Specialised-lending slotted under CRR III 122a/153(5). Collateralised by capital pool corpus. Independently underwritten and graded.

REVENUE STREAM	TRADITIONAL FORM	ABS FACTORY FORM
Capital-pool corpus management	Not present — traditional sovereign financing does not generate a managed corpus.	\$1–2bn per issuance under Corpus Mandate (AiGLE Criteria Paper No. 3). Recurring asset management fee. Compounds across issuance pipeline into sovereign wealth fund management at scale.
Secondary-market making	Limited — sovereign-bond secondary market is dominated by primary dealers; bilateral loans have no secondary market.	Programmatic senior-tranche secondary trading. Repo-eligible at central banks under HQLA L1 framework. Bid-ask capture across the asset class.
Reserve-currency clearing	Single transaction clearing on issuance and coupon flows.	Clearing on issuance proceeds, coupon flows, corpus rebalancing, secondary trading, repo financing. Compounds across the issuance pipeline.
Sovereign banking franchise	Per-transaction relationship; rebuilds with each new issuance.	Standing relationship across the issuance pipeline. Establishes natural-counterparty position for subsequent regional sovereign capital-markets transactions.
ESG / SDG-mandated capital	Limited — sovereign green bonds and SLBs partially capture ESG-mandated flows but with broad use-of-proceeds.	Asset-class-by-construction ESG/SDG alignment per the mapping in §11. Opens institutional capital flows explicitly mandated to nature-positive, climate, and circular-economy allocations.
Project-finance economics	Captured fully — direct facility lending with full upside and downside on construction and operating performance.	Captured separately through the construction-loan facility. Project-finance economics retained; construction-phase risk independently graded; senior tranche structurally insulated.

THE STRUCTURAL POINT

Traditional financing captures one of these revenue streams. The ABS Factory captures all of them simultaneously, because the form builds standing financial infrastructure rather than producing closed transactions. For the

bank that establishes the bookrunner relationship at the start of an issuance pipeline, the franchise compounds across every subsequent issuance.

This is the dual-benefit that the capital-pool RWA ABS form delivers. Project-finance economics on the construction-loan facility plus ABS economics on the senior tranche plus wealth-management economics on the corpus plus secondary-market and clearing economics on the resulting trading flows. Four structurally distinct revenue streams per issuance, each properly priced, each captured by a single institutional counterparty if the relationship is established at the start of the issuance pipeline.

The capital-pool form is what makes this combination possible. The senior tranche credit profile reflects the issuer-class structure (sovereign-issued for CBS and FBS; varying by issuer class for MSWBS per §07; SPV-with-ATE-credit-enhancement for LBS) plus the structural protection of the corpus; the construction-loan facility (where applicable) is properly priced because it is independently graded under specialised-lending slotting; the corpus is wealth-managed because the operating draw cap protects it. Three structurally distinct credit instruments per issuance for capital-pool MSWBS. Three structurally distinct fee economics. One institutional counterparty captures all of them.

THE FOUR-CORNER INSTITUTIONAL CASE

Combined across the four AiGLE-graded asset classes:

- AAA credit grade → the senior tranche is structurally robust under stress.
- Quantitative Growth profile → the capital does productive economic work.
- ESG / SDG mapping → the instrument satisfies institutional mandate criteria.
- Basel III HQLA L1 · 0% RW → the holding is capital-efficient on institutional books.

Each corner is necessary; together they are the available answer to the institutional capital deployment question. The ABS Factory is the operative mechanism. AiGLE is the grading authority. EPC's argument is that the apparatus is in place; the structural problem set out in §02 and §03 has a deployable response. The remainder of this paper documents that response.

PART II

The Four-Asset-Class Family

Grading methodology and analytical opinions: AiGLE

The four AiGLE-graded asset classes — LBS, CBS, FBS, MSWBS — are the operative implementation of the Quantitative Growth thesis set out in Part I. Each asset class addresses a different category of unproductive or wrongfully-extracted capital. CBS and FBS share the capital-pool-funded sovereign-issued or sovereign-guaranteed senior-tranche architecture and qualify for Basel III HQLA Level 1 / 0% RW capital treatment by construction. MSWBS shares the capital-pool form but is variable-issuer (federal, state, municipal-revenue, or corporate — see §07) with capital treatment determined by issuer class. LBS is structurally distinct — alternative-credit positioning with ATE-floored downside, no sovereign guarantee, no Basel III HQLA L1 positioning. This Part sets out the grading methodology that prices the four asset classes; the structural innovation of the capital-pool form (§09); the four-pillar framework that produces the credit grade (§10); and the QG / ESG-SDG / Basel III dimensions that, together with the credit grade, constitute the four-corner institutional case for capital deployment where the issuance qualifies.

ATTRIBUTION

The grading methodology, the four-pillar framework, the AiGLE Tier classification, the AiGLE Grading Scale, the Quantitative Growth Profile scoring framework, and the analytical opinions referenced in this Part are the published criteria of AiGLE — a trading division of Trance Limited (Turks and Caicos Islands ordinary entity OE025742). This Part is presented within the EPC white paper as supporting analytical apparatus for the structural argument set out in Part I. The methodology and graded outputs are AiGLE property; the broader thesis and structural framing is EPC.

§ 06 RWA NABS, CBS, FBS — Sovereign Capital-Pool ABS

Real-World-Asset Natural-Asset-Backed Securities (RWA NABS) is the umbrella class for sovereign-issued capital-pool-funded ABS over national natural-capital programmes. Within the umbrella, AiGLE grades two distinct sub-classes: CBS for conservation programmes and FBS for forestry programmes. Both are sovereign-issued or sovereign-guaranteed by construction; both qualify for Basel III HQLA Level 1 / 0% RW treatment under the conditions of §13. They differ in their underlying programme tenor, cashflow profile, and investor mandate.

CBS — Conservation-Backed Security

CBS finances national conservation programmes through a capital-pool wrap. The underlying programme is structurally perpetual — biodiversity units, ecosystem service fees, water credits, conservation programme revenue, and corporate offtake under SDG-linked or CSR commitments. There is no harvest event; there is no terminating cashflow. The senior tranche is structured at full

tenor (30–50 years) but the underlying programme persists beyond senior-tranche maturity into refinancing or sovereign endowment continuation. CBS is performance-leaning — the value proposition is conservation outcomes, with stable annual ecosystem-services revenue servicing the senior coupon. Senior-tranche return expectations are modest (4.5–5.5% p.a. on long-tenor); volatility is very low (1–2%); the instrument is positioned as a sovereign-equivalent core holding for endowment-style mandates.

FBS — Forestry-Backed Security

FBS finances national forestry programmes through a capital-pool wrap. The underlying programme is full-tenor — typically matched to the rotation length of the dominant tree genus, ranging from 15–80 years. The senior tranche is sized to match the rotation and serviced by stacked annual revenue plus the back-loaded timber clearfell event at maturity. FBS is return-leaning — annual cashflow plus terminal real-asset upside. Senior-tranche return expectations are modestly higher than CBS (5.0–6.5% p.a. depending on rotation profile and corpus mandate); volatility is modestly higher (2–4%); the instrument is positioned for matched-tenor liability work in pension funds, insurance general accounts, and institutional fixed-income mandates seeking sovereign-equivalent credit with real-asset upside.

ONE STRUCTURAL FAMILY, TWO INVESTOR MANDATES

CBS conserves. FBS produces. Both are sovereign-issued or sovereign-guaranteed by construction and qualify for the same gilt-equivalent regulatory treatment. The distinction is not a credit distinction — both can grade AAA — but a mandate distinction. Endowment capital takes CBS; production capital takes FBS. Mixed mandates can take both, in proportions reflecting the institution's split between conservation outcomes and real-asset return.

FBS rotation profile classification

ROTATION PROFILE	ROTATION	REVENUE TIMING	REPRESENTATIVE GENERA
Fast Rotation Softwood	15–25 yrs	Late, single-event timber + annual ecosystem	Pinus radiata, Eucalyptus globulus, Pinus taeda. Industrial plantation. Highest timber-revenue concentration.
Medium Rotation	25–50 yrs	Late timber + annual carbon + biodiversity	Picea abies, Pinus sylvestris, Pseudotsuga menziesii. Northern coniferous. Common across European and North American sovereign forestry.

ROTATION PROFILE	ROTATION	REVENUE TIMING	REPRESENTATIVE GENERA
Long Rotation Hardwood	50–80 yrs	Distant timber + sustained ecosystem	Quercus robur, Fagus sylvatica, Fraxinus excelsior. Native hardwood. Lower timber concentration.
Continuous Cover	Indefinite	Annual ecosystem + selective timber	Mixed-species native forest under continuous-cover forestry. The closest FBS profile to perpetual CBS.
Tropical Hardwood	30–60 yrs	Late timber + carbon-dominant	Tectona grandis (teak), tropical mixed natives. Higher absolute carbon density.
Mangrove / Blue Carbon	20–40 yrs	Carbon-dominant, ecosystem services	Rhizophora, Avicennia, Sonneratia. Coastal protection co-benefit. Long-tenor carbon at high biomass density.

§ 07 MSWBS — Industrial Capital-Pool ABS

Municipal Solid Waste-Backed Securities (MSWBS) sit within the capital-pool family alongside CBS and FBS but with two distinctive structural features. First, the underlying programme is industrial rather than biological — the senior tranche is serviced by post-stabilisation operating cashflow from waste-processing facilities (gate fees from municipal counterparties, output-stream proceeds from recovered raw materials, tax-credit monetisation where applicable). Second, the capital pool is deployed against construction-loan facilities to fund facility build, rather than directly against an underlying programme that already exists.

The MSWBS architecture ringfences construction-phase risk into a separately-graded construction-loan facility, leaving the senior MSWBS tranche serviced by post-stabilisation operating cashflow with structural enhancement from the corpus. Three structurally distinct credit instruments per issuance — senior tranche, construction-loan facility, capital-pool corpus — each priced at the appropriate risk. The full architecture is set out in Part IV §17 in the context of the Carbotura worked example.

MSWBS issuer-class taxonomy

Unlike CBS and FBS — which are sovereign-issued or sovereign-guaranteed by construction — MSWBS is structurally variable-issuer. The underlying programme is municipal-anchored on the demand side (gate fees from municipal counterparties under long-dated Offtake Agreements) but the senior-tranche issuer or guarantor varies across four distinct classes. Each class produces a different senior-

tranche credit profile and a different Basel III capital treatment. AiGLE grades each class under the same four-pillar methodology but with class-specific Pillar IV counterparty analysis.

ISSUER CLASS	STRUCTURE	CAPITAL TREATMENT
Federal-guaranteed	Senior tranche issued or guaranteed under federal infrastructure-finance vehicles (DOE Loan Programs Office, USDA Rural Development, EPA WIFIA-analogue facilities). Federal guarantee typically conditional on programme alignment with statutory infrastructure or environmental policy.	Basel III HQLA Level 1 / 0% RW where guarantee meets CRE 22.74 et seq. conditions for direct, explicit, irrevocable, unconditional sovereign guarantee. Equivalent to direct US Treasury exposure in domestic-currency holdings.
State-guaranteed	Senior tranche guaranteed by state general-obligation pledge or under state-level infrastructure-finance vehicles. Typical anchor structure for programmes operating under state diversion mandates (CA SB 1383; MA SB 612; WA SB 5022; equivalent state mandates).	Capital treatment determined by state credit rating and the specific guarantee structure. Aaa-rated states with direct GO guarantees may achieve effective gilt-equivalent treatment; lower-rated states or revenue-secured guarantees attract higher risk weights.
Municipal-revenue	Senior tranche secured by municipal Offtake Agreements without state or federal guarantee. Closer in structure to a revenue bond than a general-obligation bond. Investment-grade municipal counterparty credit on the input side; output-stream commodity revenue diversification on the output side; capital-pool structural enhancement.	Capital treatment is municipal-credit, not sovereign-credit. Senior-tranche grade reflects underlying municipal counterparty mix; standardised-approach risk weight typically in the 20% range for AAA-AA municipal exposures. Does not qualify for HQLA Level 1.
Corporate	Senior tranche issued or guaranteed by a corporate counterparty — typically a major waste-management operator, an integrated industrial conglomerate, or a consumer-goods company under Extended Producer Responsibility (EPR) mandates. Corporate guarantor carries the senior-tranche credit risk.	Capital treatment is corporate-credit. Senior-tranche grade is bounded by the corporate guarantor's credit standing. Standardised-approach risk weight per the corporate's external rating (typically 20–100% for IG corporates). Suited to corporate treasury, insurance general account, and IG fixed-income mandates.

WHY THE TAXONOMY MATTERS

MSWBS is not uniformly gilt-equivalent. The capital-pool form, the construction-loan ringfencing, and the four-pillar grading methodology apply across all four issuer classes – but the senior-tranche capital treatment depends on which issuer class structures the specific issuance. The institutional opportunity therefore extends beyond purely sovereign or sovereign-equivalent paper:

Federal-guaranteed insurance general account. – bank treasury / central-bank reserve / Gilt-equivalent capital treatment on senior tranche.

State-guaranteed municipal bond funds / varies by state rating. – bank treasury where state credit qualifies / ESG-mandated allocations. Capital treatment

Municipal-revenue ESG-mandated allocations. – municipal bond funds / IG fixed-income / Revenue-bond credit profile; not sovereign-equivalent.

Corporate account / IG fixed-income. – corporate treasury / insurance general Corporate-credit profile bounded by corporate guarantor rating.

Each issuer class serves a different institutional placement universe. The MSWBS franchise is therefore broader than a sovereign-only positioning would suggest – corporate-issued MSWBS, in particular, opens a financing channel for EPR-mandated industrial counterparties that does not depend on government-balance-sheet capacity. Carbotura, the worked example in Part IV, contemplates a sovereign-equivalent guarantee structure; other Carbotura-platform issuances or other MSWBS platforms may use any of the four issuer classes.

MSWBS – THREE INSTRUMENTS PER ISSUANCE

Senior MSWBS tranche operating cashflow. – capital-pool corpus + post-stabilisation

above. Capital treatment per issuer-class taxonomy

Basel III L1 HQLA · 0% RW under federal guarantee or sovereign-equivalent.

Construction-loan facility – collateralised by the capital pool.
Specialised-lending slotted.

Originated from the ABS Factory stacked lending book.

Independently underwritten and graded.

Capital pool corpus – HQLA-eligible instruments per published Mandate (Criteria Paper No. 3).

Itself a managed asset book under custodian oversight.

§ 08 LBS — Alternative-Credit Securitisation

Litigation-Backed Securities (LBS) are structurally distinct from the capital-pool family. Senior tranches are issued by bankruptcy-remote SPVs holding portfolios of consumer or commercial legal claims, with downside protection from After-the-Event (ATE) insurance and capital-floor guarantees from investment-grade insurers. The senior-tranche grade reflects the AiGLE four-pillar analysis applied to a binary-outcome model: claim quality and precedent (asset); overcollateralisation and waterfall (structural); precedent stability, limitation, and forum (legal/operational); defendant solvency and ATE insurer credit (counterparty). LBS is positioned as alternative-credit — high expected return (~46% p.a.), moderate volatility (8–17%), high Sharpe (2.4–5.3) — and serves yield-enhancement mandates rather than gilt-equivalent treasury positions.

AiGLE currently maintains five operative AAA-graded LBS certificates: PPI Plevin Commission Claims, Car Finance Unfair Relationship, Energy Commission Claims, Irresponsible Lending, and the Blended Pool. The methodology is set out in full in AiGLE Criteria Paper No. 1. LBS is the originating asset class for the AiGLE ABS Factory — operative since 2025 — and the demonstration that AiGLE-graded structured loan-note issuance can deliver AAA senior-tranche credit on Real-World cashflow at scale. The LBS portfolio is the operative proof-of-concept for the wider RWA ABS thesis.

LBS POSITIONING

LBS is structurally alternative-credit, not gilt-edged. The QG mechanism is wealth redistribution and monetary velocity — capital wrongfully extracted by financial institutions returns to consumer balance sheets and re-enters the productive economy through retail spending and deposit channels. The Sharpe ratio profile (2.4–5.3) reflects high expected return over moderate volatility with ATE-floor downside compression, not low absolute volatility. LBS does not qualify for Basel III HQLA L1 / 0% RW; it serves yield-enhancement mandates within alternative-credit allocations. Five live AAA-graded certificates as at the date of this paper.

§ 09 The Capital-Pool Structure — Structural Innovation

This is the section that defines the capital-pool form. The capital-pool-funded structure is what distinguishes AiGLE-graded RWA NABS, CBS, FBS and MSWBS from every comparator instrument in market — and what supports gilt-equivalent senior-tranche treatment for sovereign-issued or sovereign-guaranteed structures (CBS and FBS by construction; MSWBS where the issuer class qualifies under §07), the permanent or full-tenor programme financing, and the sovereign wealth fund management opportunity at scale.

How the structure works

Senior-tranche proceeds — typically a benchmark size of \$1bn to \$2bn per issuance — are placed into a capital pool held in a bankruptcy-remote SPV. The proceeds are not deployed directly into the natural-capital programme or the construction of facilities. Instead, the pool is invested in capital-markets instruments under a published Corpus Mandate, governed by AiGLE's Corpus Management Standard (Criteria Paper No. 3). The pool generates an annual market return.

The natural-capital programme is funded annually from the pool's return — silvicultural operations, MRV, registry fees, monitoring, programme management — with the corpus preserved. The senior tranche of the ABS is serviced by the programme's stacked-revenue cashflows over the tenor: biodiversity units, ecosystem fees, water credits, carbon credits, timber proceeds for FBS, gate fees and output-stream proceeds for MSWBS. The senior tranche has no claim on the corpus during the tenor — the corpus is structurally segregated and dedicated to programme financing.

At senior-tranche maturity, the corpus position is determined by the structure of the issuance. For CBS, the underlying programme is perpetual and the corpus is preserved through senior-tranche refinancing or sovereign endowment continuation. For FBS, the programme terminates at clearfall and the corpus is unwound or rolled into a successor FBS for the next rotation. For MSWBS, the corpus

persists through successive construction-loan amortisation cycles as the programme expands across facilities.

THE CAPITAL-POOL MECHANICS

1. Issuance: Senior tranche placed at \$1-2bn benchmark size. Proceeds into bankruptcy-remote SPV.
2. Corpus: Pool invested in capital-markets instruments per published Corpus Mandate.
Mandate disclosed in offering documentation; governed by AiGLE Criteria Paper No. 3.
3. Operations: Programme funded annually from pool returns. Corpus preserved.
Operating draw structurally capped at projected pool return; no corpus drawdown.
4. Senior tranche: Serviced from programme stacked-revenue cashflows over tenor.
Sovereign-guaranteed; no senior claim on corpus during tenor.
5. Construction: For MSWBS – corpus serves as security for construction-loan facility.
Construction loan independently underwritten; specialised-lending slotted.
6. Maturity: CBS – perpetual programme, corpus rolls or endows.
FBS – rotation matured, corpus unwinds or rolls into successor.
MSWBS – corpus persists through expansion cycles.

Why the structure de-risks the senior tranche

The conventional sovereign green-bond or DFN-swap structure exposes the investor to country credit risk on the entire instrument. A fiscal stress that downgrades the sovereign downgrades the bond identically, regardless of the green or conservation purpose of the proceeds. The capital-pool structure changes this materially. The senior tranche's credit profile is now bifurcated into three components, only one of which is country credit risk:

- **Capital-pool corpus credit.** The corpus sits in capital-markets instruments — sovereign gilts, IG credit, structured fixed-income, or balanced mandates — chosen per the published Corpus Mandate. The corpus's own credit profile is independent of the issuing sovereign's credit profile (and indeed, may be materially stronger if the corpus mandate is denominated in reserve-currency gilts). For a Tier-3 sovereign issuing CBS or FBS, the corpus can sit predominantly in Tier-1

sovereign gilts under the mandate, materially upgrading the bifurcated credit profile relative to the sovereign's own rating.

- **Programme operating cashflow.** The senior coupon is serviced from stacked-revenue programme cashflows. These are sovereign-domiciled and carry their own counterparty and operational risks, addressed in Pillar I of the four-pillar framework. They are not directly correlated with sovereign general fiscal position — a fiscal crisis in the issuing sovereign does not materially impair the carbon credits, biodiversity units, or ecosystem fees that service the coupon.
- **Sovereign guarantee on the senior tranche.** The third leg is the residual sovereign guarantee — the unconditional, irrevocable guarantee on the senior tranche that engages only after the corpus and the operating cashflow have been exhausted. In a properly structured RWA NABS, this guarantee is the third loss-absorbing layer, not the first. The country credit risk that dominates a conventional sovereign green bond is the residual claim on a structurally enhanced senior tranche.

WHAT THE STRUCTURE DELIVERS

Permanent (CBS) or full-tenor (FBS, MSWBS) programme financing – no operational financing risk from sovereign budget cycles.

Sovereign retains full title to the underlying natural asset – capital is raised against cashflow rights, not asset transfer.

Senior-tranche credit risk routed through capital markets – not country credit. A multi-billion-dollar capital pool sits in HQLA-eligible instruments per disclosed mandate; senior coupon serviced by programme cashflows; sovereign guarantee as residual backstop.

Sovereign wealth fund management opportunity at every issuance – the corpus pool is a managed asset book at \$1–2bn per benchmark, multiplied across every CBS, FBS, and MSWBS issuance globally, generating a sovereign wealth fund management universe at scale.

The sovereign wealth fund opportunity

The capital-pool corpus is a managed asset book. At benchmark issuance size of \$1–2bn, and with national-scale RWA NABS programmes potentially issuing multiple benchmarks per year, every sovereign issuer's corpus collection rapidly scales into a sovereign wealth fund of meaningful size. A sovereign issuing \$5bn of CBS and \$5bn of FBS over five years has, by year five, a corpus pool of \$10bn under disciplined institutional management — independent of the underlying natural-capital programmes, denominated in capital-markets instruments per disclosed mandate, and earning a market return that funds the programmes perpetually or full-tenor.

This is sovereign wealth fund creation at scale. The mechanism is structural, not discretionary: every RWA NABS issuance creates corpus; every corpus is professionally managed under disclosed mandate; every mandate generates returns that compound over the issuance tenor. For sovereigns without existing sovereign wealth fund infrastructure, RWA NABS issuance is itself a sovereign wealth fund formation strategy. For sovereigns with existing infrastructure, RWA NABS corpus integrates into the existing asset management framework. Either way, the capital-pool structure converts a fiscal financing question into an asset management opportunity.

AIGLE'S ROLE ON THE CORPUS

AiGLE grades the senior tranche and publishes the Corpus Management Standard (Criteria Paper No. 3) that governs the corpus. The Standard sets minimum requirements for custodian, mandate disclosure, eligible instruments, reporting cadence, trustee oversight, audit, and deviation triggers. Issuers that fail the Standard cannot achieve AAA on the senior tranche — corpus management is a Pillar II input and a structural prerequisite, not a post-issuance discretion. The Standard is set out in full as Part VI of this paper.

§ 10 The Four-Pillar Grading Methodology

The four-pillar methodology is applied to both CBS and FBS. The pillars retain their structural role; the analytical content within each pillar is calibrated to the asset class. The capital-pool-funded structure introduces specific Pillar II content — Corpus Mandate Analysis — that is unique to the RWA NABS family.

Pillar I — Asset Analysis (30%)

The economic substance of the underlying programme and the cashflow rights conveyed to the SPV. Drawn from the Programme Validation Standard (§6) and the asset-class-specific analysis (§8).

- Programme integrity score (validated under §6)
- Tenure security and FPIC compliance
- Revenue stream stack: number, type, and quality
- Cashflow timing — stable annual (CBS) or stable annual plus back-loaded clearfell (FBS)
- MRV robustness and audit cadence
- Climate physical risk exposure on the asset side

Pillar II — Structural Analysis (25%)

How the instrument is constructed around the programme cashflows and the capital pool. The structural pillar carries explicit Corpus Mandate Analysis under Criteria Paper No. 3.

- SPV bankruptcy remoteness from the sovereign and the programme manager
- Tranche structure and senior-tranche subordination level
- Corpus Mandate disclosure and compliance with Criteria Paper No. 3
- Custodian credit standing and operational arrangements
- Eligible instruments under the Mandate; concentration limits; ESG screens
- Operating-draw cap (programme funded from pool returns; no corpus drawdown)
- Trigger mechanics — events of default, mandate breach, custodian credit event, acceleration rights
- Currency and interest-rate hedging arrangements

Pillar III — Legal, Operational & Sovereign Override Risk (25%)

The risk that the legal and operational framework around the programme deteriorates during the life of the instrument. Sovereign override risk dominates this pillar for natural-capital ABS — the probability and impact of a future sovereign action that impairs cashflows without constituting formal default.

- Sovereign override risk (legislative reversal, harvest moratorium, registry rebasing)
- Regulatory continuity (carbon market integrity bodies, biodiversity standard-setters)
- Programme operational continuity across administrations
- Climate adaptation policy risk (changes to permissible silvicultural practice for FBS)
- Litigation risk against the programme (NGO challenge, indigenous claim)
- Cross-border arbitration availability where the SPV is offshore

Pillar IV — Counterparty & Offtake Risk (20%)

The credit quality of the parties whose financial obligations underpin instrument cashflows. Bifurcated assessment: sovereign as residual backstop, plus offtake counterparties as the proximate sources of revenue.

- Sovereign tier (per §07) — applied to the residual guarantee
- Currency profile and external position risk
- Offtake counterparty diversification and concentration
- Compliance-market depth for each revenue stream
- Voluntary-market risk where applicable
- Multilateral or sovereign wealth fund offtake commitments

Pillar weighting

RWA NABS PILLAR WEIGHTINGS

Pillar I	– Asset Analysis (Programme & Cashflow Quality)	30%
Pillar II	– Structural Analysis (incl. Corpus Mandate)	25%
Pillar III	– Legal, Operational & Sovereign Override Risk	25%
Pillar IV	– Counterparty & Offtake Risk	20%

Pillar III is materially heavier here than in LBS, reflecting the dominance of sovereign override and long-horizon legal risk in this asset class. Pillar II carries explicit Corpus Mandate analytical content under Criteria Paper No. 3 – the structural innovation of the capital-pool form.

§ 11 Quantitative Growth Profile by Asset Class

AiGLE grades published in this brief are credit grades — analytical opinions on the structural and credit characteristics of the senior tranche. They speak to the question: how reliable is the cashflow that services this instrument? The credit grade does not speak to a separate analytical question that institutional investors increasingly ask: how productively does this instrument deploy capital into the real economy? AiGLE addresses this question through a complementary scoring framework — the Quantitative Growth Profile — published alongside the credit grade on every AiGLE-graded instrument that drives QG.

The Quantitative Growth thesis

Quantitative Growth is the deployment of capital into Real-World Assets that build economic value through processing, financing, and trading. The contrast is with Quantitative Easing, which expands monetary aggregates against existing assets and tends to dilute the unit value of currency. QG expands the productive base — physical, biological, or velocity — through which capital re-enters the real economy. AiGLE's view is that the question of how an instrument drives QG is structurally separate from the question of how creditworthy its senior tranche is, and that institutional investors with mandates that recognise QG should have an analytical framework for choosing between asset classes on this basis.

Three dimensions

The QG Profile scores each asset class on three independent dimensions, each measured on a 1–5 scale. The composite profile is a three-character string (V·D·E) shown on the certificate alongside the credit grade.

- **Velocity (V)** — the rate at which capital deployed by the instrument re-enters the productive economy. High velocity instruments redistribute capital quickly through consumer or industrial

channels; low velocity instruments preserve capital in long-duration positions where the QG impact accrues through asset-base growth rather than turnover.

- **Duration (D)** — the persistence of the QG impact over time. High duration instruments produce QG effects that compound across decades or are structurally perpetual; low duration instruments produce concentrated, single-event QG impacts.
- **Asset-Base Expansion (E)** — the degree to which the instrument expands the physical, biological, or balance-sheet asset base of the economy rather than redistributing existing capital. High expansion instruments grow the productive asset base through biological growth, industrial conversion, or balance-sheet recognition of new asset classes; low expansion instruments redistribute existing capital, with QG flowing through the secondary effects of that redistribution.

How AiGLE scores

Each dimension is scored independently on a 1–5 scale by AiGLE analytical committee at issuance, drawing on AiGLE's published QG calibration tables and the issuer's offering documentation. Velocity is calibrated against capital turnover ratios across comparable real-economy channels. Duration is calibrated against the structural tenor of the QG impact, which may be longer or shorter than the senior-tranche tenor. Asset-Base Expansion is calibrated against measurable asset-base growth — biological, industrial, or balance-sheet — divided by capital deployed.

Scores are surveyed annually. Material structural changes — expansion programme, refinancing, mandate amendment — trigger off-cycle review. The QG Profile is independent of the credit grade: an instrument can be AAA on credit with a modest QG profile, or grade lower on credit with an exceptional QG profile. The two scores convey different analytical messages and serve different investor mandates.

QG Profile by asset class

The four asset classes graded by AiGLE at the date of this brief produce structurally distinct QG profiles. Each is set out below in its own terms — the framework is not a competition between asset classes but a profile of how each one drives Quantitative Growth in its own way.

LBS — Litigation-Backed Securities

LBS drives QG through wealth redistribution and monetary velocity. Capital recovered from financial institutions (where it sits at low velocity as fee or interest income) returns to consumer balance sheets, where it clears existing debt, restores credit access, and re-enters the productive economy through retail spending, deposit, and lending channels. The redistribution itself is a high-velocity QG event — capital moves from low-velocity bank balance sheet to high-velocity consumer economy and returns to the system through deposit and consumption flows. The duration of the impact is short — the redistribution event resolves within the senior-tranche tenor — but the velocity is the highest of any AiGLE-graded asset class.

LBS QG PROFILE · V5 / D1 / E3

Velocity (5/5) consumer economy.	Capital recovered redistributes immediately to consumer economy.
classes.	Highest velocity profile across the four asset classes.
Duration (1/5) tenor (~5 yrs).	Single-redistribution event over senior-tranche QG impact concentrated rather than persistent.
Asset-Base Expansion (3/5) asset-base creation, velocity through the create new physical existing capital.	Redistribution of existing capital rather than but with material secondary effects on monetary consumer economy. The redistribution does not assets but re-prices the productive use of

CBS — Conservation-Backed Securities

CBS drives QG through permanent asset preservation with stacked monetisation across primary cashflow streams (biodiversity, ecosystem fees, water credits) and secondary balance-sheet recognition (corporate offtake under SDG-linked or biodiversity commitments registers as recognised intangible asset on offtaker books; standing carbon stack monetises through ICVCM-aligned issuance). The underlying natural capital is preserved indefinitely, generating cashflow without depletion, while simultaneously serving as the qualifying asset for a growing set of corporate ESG and biodiversity reporting frameworks. CBS is the only AiGLE-graded asset class whose underlying value is structurally perpetual — and the only asset class whose secondary economic value accrues to corporate counterparties through balance-sheet recognition as well as to the sovereign through cashflow rights.

CBS QG PROFILE · V2 / D5 / E4

Velocity (2/5) preserving by design.	Annual ecosystem-services cashflow, corpus-
classes – QG impact	Lower velocity than the other three asset
turnover.	accrues through asset preservation, not

Duration (5/5) persists indefinitely; maturity. classes.	Theoretically perpetual. Underlying programme corpus rolls or endows at senior-tranche Highest duration profile across the four asset
Asset-Base Expansion (4/5) creates new tradeable sheet recognition asset).	Asset preservation plus stacked monetisation units (biodiversity, water, carbon) and balance- (corporate offtake registers as ESG / intangible

FBS — Forestry-Backed Securities

FBS drives QG through biological growth and stacked monetisation across the rotation. Trees grow biologically without further capital input, accumulating biomass that monetises across timber, carbon, biodiversity, water, and ecosystem services. The growth is physical, observable, and compounding. Forestry asset bases enter the economy multiple times — as standing-forest carbon, as harvested timber, as engineered wood product, as construction material, as employment, as tax base, as long-term sovereign wealth. The QG mechanism is the most direct of the four: capital deployed into the corpus generates operational financing, which sustains biological asset growth, which generates terminal real-asset value plus annual ecosystem cashflow.

FBS QG PROFILE · V3 / D4 / E5	
Velocity (3/5) (moderate-velocity), plus high-magnitude).	Annual carbon and biodiversity cashflow terminal timber clearfell (low-velocity but
Duration (4/5) typically refinance into across rotations.	Full rotation tenor 15–80 yrs; programmes successor FBS at clearfell, extending duration
Asset-Base Expansion (5/5) capital input.	Biological growth compounds without further

Forest enters the economy multiple times across the rotation:
 standing carbon, harvested timber, engineered product, construction,
 employment, tax base. Highest asset-base-expansion profile across the four asset classes.

MSWBS — Municipal Solid Waste-Backed Securities

MSWBS drives QG through industrial re-mining — converting municipal solid waste from a disposal cost into an industrial input, with multiple monetisation events across the recovery chain. Material that previously entered landfills (negative value, ongoing cost) is recovered as raw material (positive value, ongoing revenue), with the spread captured by the programme. Each tonne of waste enters the economy multiple times: as gate fee revenue (input side), as recovered metals/polymers/CO₂/hydrogen credit/fertiliser feedstock (output side, multi-stream), as municipal disposal cost saving, as state-level diversion-mandate compliance, as employment, as tax base. The QG mechanism is conversion efficiency, with high turnover at the operational level and material asset-base expansion through the recovery of materials that would otherwise have been removed from the economic system.

MSWBS QG PROFILE · V4 / D3 / E4	
Velocity (4/5) circulate continuously the operational level.	Gate-fee revenue and output-stream sales through the operating cycle. High velocity at
Duration (3/5) across successive facility has a	Facility lifetime 20-30 yrs; programmes expand construction-loan amortisation cycles, but each defined operational tenor.
Asset-Base Expansion (4/5) Recovered materials disposal costs avoided;	Waste-to-resource conversion recovers materials have been removed from the economic system. re-enter manufacturing chains; municipal

state-level diversion mandates satisfied.

Comparative QG profile across the four asset classes

DIMENSION	LBS	CBS	FBS	MSWBS
Velocity (V)	5 / 5	2 / 5	3 / 5	4 / 5
Duration (D)	1 / 5	5 / 5	4 / 5	3 / 5
Asset-Base Expansion (E)	3 / 5	4 / 5	5 / 5	4 / 5
Composite QG Profile	V5 / D1 / E3	V2 / D5 / E4	V3 / D4 / E5	V4 / D3 / E4
ESG Pillar	Social	Environmental	Environmental	Environmental
SDG Cluster	SDG 8 · 10 · 16	SDG 6 · 13 · 14 · 15	SDG 8 · 12 · 13 · 15	SDG 9 · 11 · 12 · 13
Mandate fit	Social impact / consumer redress / financial inclusion	Biodiversity / nature-positive / TNFD-aligned	Climate / carbon-allocated / sustainable forestry	Circular economy / sustainable infrastructure
Primary QG mechanism	Wealth redistribution → monetary velocity	Asset preservation + stacked monetisation	Biological growth + multi-stream stacking	Industrial re-mining + conversion efficiency
Lead investor proposition	High-velocity capital cycle	Permanent ESG balance-sheet recognition	Compounding real-asset wealth formation	Circular-economy capital deployment

INTERPRETING THE QG PROFILE

Each asset class earns a distinctive QG profile shape. LBS – the velocity champion. CBS – the duration champion. FBS – the asset-base-expansion champion. MSWBS – balanced across all three. The composite profile is informational, not ordinal: a V5/D1/E3 profile is not better or worse than V2/D5/E4, it is differently shaped, and serves a different mandate.

Institutional investors with mandates that recognise QG can use the profile to match instruments to mandate. Sovereign wealth funds and endowments seeking permanent capital allocation prioritise high-D instruments. Pension funds matching multi-decade liabilities prioritise high-D and high-E instruments. Banks seeking high-velocity capital cycles prioritise high-V instruments. Municipalities seeking diversion-mandate compliance plus revenue prioritise high-V and high-E industrial instruments.

QG is independent of credit grade. An AAA credit grade tells you the senior tranche is structurally robust. The QG profile tells you what economic work the capital does. Both matter; neither substitutes for the other.

THE FOUR-CORNER INSTITUTIONAL CASE

The AiGLE-graded RWA ABS family combines four institutional cases on a single instrument. AAA credit grade – the senior tranche is structurally robust. QG profile – the capital does productive economic work. ESG / SDG mapping – the instrument lands in a defined institutional mandate category (Social for LBS; Environmental across the three sub-categories of biodiversity, climate, and circular economy for CBS, FBS, and MSWBS). Basel III HQLA L1 / 0% RW – applies to CBS and FBS by construction (sovereign-issued or sovereign-guaranteed) and to MSWBS where the issuance carries federal or sovereign-equivalent guarantee under the conditions of §13 and the issuer-class taxonomy of §07. LBS does not qualify for HQLA L1 – alternative-credit positioning by construction.

Each corner reinforces the others. SDG alignment opens the institutional door for ESG-mandated capital. Basel III treatment makes the holding capital-efficient. The QG profile shows the capital does economic work rather than sitting in a closed monetary loop. The AAA credit grade makes the senior tranche structurally fundable. Together they form the four-corner case for institutional capital deployment at scale into RWA ABS.

Stablecoin liquidity and RWA ABS

AiGLE-graded RWA ABS senior tranches are institutional-grade fixed-income instruments. They sit on balance sheets across multi-decade tenors. They are not, in their native form, retail-liquid. The connection between AiGLE-graded RWA ABS and retail-rail liquidity is the question of stablecoin reserve composition — and it is a question worth flagging, even if the full economic analysis sits outside the scope of this brief.

The current stablecoin market — approximately \$200bn across the principal issuers — holds the majority of its reserves in short-dated US Treasuries. Each unit of stablecoin issued therefore funds, by reserve construction, US sovereign debt issuance. The aggregate effect is to make the stablecoin market one of the larger non-sovereign holders of short-dated Treasury bills, providing a captive demand base for sovereign deficit financing at retail scale.

AiGLE-graded RWA ABS senior tranches — particularly CBS, FBS, and MSWBS, which carry Basel III HQLA Level 1 / 0% RW positioning under the conditions of §15 — are eligible reserve assets under the same regulatory framework that supports Treasury holdings. A stablecoin issuer holding RWA ABS senior tranches in its reserve composition would, by reserve construction, fund Real-World Asset deployment rather than sovereign deficit. The structural implications are significant: stablecoin liquidity flowing into productive Real-World Assets rather than into sovereign general expenditure; reserve transparency strengthened by the published Corpus Mandate disclosures under Criteria Paper No. 3; and a measurable shift in the funding source for deficit financing toward genuine asset-base expansion.

STABLECOIN POTENTIAL — THE BRIDGE TO LIQUIDITY

RWA ABS deliver senior-tranche credit quality. Stablecoins deliver retail-rail liquidity. The two are structurally complementary: a sovereign-guaranteed or sovereign-equivalent-guaranteed senior tranche (CBS and FBS by construction; federal-guaranteed MSWBS per §07) is exactly the reserve composition a properly-disclosed stablecoin issuer should hold. The combination connects inert ABS positions to high-velocity payment liquidity, and shifts stablecoin reserve demand from sovereign debt to Real-World Asset deployment.

The full economic case — credit market implications, regulatory framework, reserve disclosure standards — sits outside the scope of this brief. AiGLE records the structural opportunity here and is willing to develop the full treatment as a separate paper if there is institutional interest.

§ 12 Headline Metrics — LBS, CBS, FBS, MSWBS

AiGLE grades four asset classes under three criteria papers: LBS under Criteria Paper No. 1 (litigation-backed securities), CBS and FBS under this paper (Criteria Paper No. 2), and MSWBS under the criteria established in Part III of this brief. All four can support senior-tranche AAA grades. Their risk-adjusted return metrics are calibrated to different points on the risk-return frontier and serve different institutional mandates.

HEADLINE METRICS – INTERPRETATION

Both AAA does not mean both are the same instrument. The AAA grade speaks to credit quality of the senior tranche. The Sharpe ratio reflects where the instrument is positioned on the risk-return frontier — and the four asset classes are positioned in different places by design.

Comparative metrics across the four asset classes

DIMENSION	LBS	CBS	FBS	MSWBS
Senior grade band	AAA	AAA	AAA	AAA
Senior tenor	5 yrs (typical)	30–50 yrs	15–80 yrs	10–15 yrs
Expected return E[R]	~46% p.a.	~5.0% p.a.	~5.5% p.a.	~5.0% p.a.
Risk-free benchmark	UK 2Y Gilt	UK 30Y Gilt	UK 30Y Gilt	UK 15Y Gilt
Total volatility σ	8 – 17%	1 – 2%	2 – 4%	2 – 3%
Sharpe ratio	2.4 – 5.3	0.3 – 0.5	0.4 – 0.7	0.2 – 0.4
Sortino ratio	3.0 – 7.1	0.6 – 1.0	0.7 – 1.4	0.3 – 0.6
Source of high Sharpe	High return numerator	n/a — gilt-edged design	n/a — gilt-edged design	n/a — gilt-edged design
Source of low volatility	ATE-insurer floor	Capital pool + sovereign + diversification	Capital pool + sovereign + diversification	Capital pool + municipal + diversification
Capital treatment	Alternative credit	Basel III L1 HQLA · 0% RW	Basel III L1 HQLA · 0% RW	Basel III L1 HQLA · 0% RW (Q)
Investor proposition	Yield enhancement vs IG credit	Performance-leaning — conservation outcomes	Return-leaning — annual + real-asset upside	Return-leaning — capital flows + amortising
Natural mandate	Hedge fund / family office	SWF / endowment / reserve manager	Pension / insurance general account	Pension / IG fixed income

WHAT THE TABLE SHOWS

An LBS senior tranche and an RWA NABS (CBS, FBS, or MSWBS) senior tranche are not substitutes. They occupy different points on the institutional balance sheet, attract different mandates, and carry different capital treatments. The same letter grade does not imply the same investment proposition.

LBS earns its high Sharpe from a high return numerator over a moderate-volatility denominator with ATE-floor downside compression – the alternative-credit positioning. CBS / FBS / MSWBS earn institutional-grade Sharpe from low absolute return over very low absolute volatility – the institutional fixed-income positioning. Different by design.

Within the institutional fixed-income family, CBS sits longest-tenor and lowest-volatility (performance-leaning); FBS sits at modestly higher return with modestly higher volatility (return-leaning); MSWBS sits at intermediate tenor with construction-loan-amortisation cashflow profile (return-leaning, amortising). Capital treatment within the family varies – CBS and FBS are sovereign-issued or sovereign-guaranteed by construction; MSWBS is variable-issuer per the §07 taxonomy.

§ 13 Government-Note-Wrapped ABS — Basel III Treatment

This section addresses the Basel III treatment of capital-pool-funded senior tranches that carry a sovereign or sovereign-equivalent guarantee — CBS and FBS by construction, and federal-guaranteed MSWBS under the §07 issuer-class taxonomy. State-guaranteed MSWBS, municipal-revenue MSWBS, corporate MSWBS, and LBS each have different capital treatments addressed below the main §13 discussion. The Basel III HQLA Level 1 / 0% RW positioning is what makes the gilt-equivalent senior-tranche treatment available, and is the regulatory foundation of the institutional asset class for sovereign-guaranteed structures.

The instruments graded under this framework are Government-Note-Wrapped ABS — capital-pool-funded senior tranches issued or guaranteed by an OECD-qualifying sovereign, structured to deliver institutional-grade credit quality and to qualify for Basel III HQLA Level 1 classification and 0% standardised-approach risk weight. The capital-pool structure strengthens rather than weakens this regulatory case, because the corpus is itself sitting in HQLA-eligible instruments under a published mandate.

The Basel III framework

Basel III treats sovereign exposures and securitisation exposures under different regimes. A direct exposure to a sovereign rated AA- or higher in its domestic currency attracts a 0% risk weight under the standardised approach. A securitisation exposure attracts risk weights determined by the SEC-SA, SEC-ERBA, or SEC-IRBA methodologies — typically materially higher than 0% even on senior tranches. The structural question for a Government-Note-Wrapped ABS is which regime applies.

Where the sovereign issues or unconditionally and irrevocably guarantees the senior tranche, and where the senior tranche ranks pari passu with general sovereign obligations, the exposure is properly characterised as a direct sovereign exposure rather than as a securitisation exposure for credit risk purposes. Basel III paragraphs on guarantor substitution (CRE 22.74 and following) provide the analytical basis: where a guarantee is direct, explicit, irrevocable, and unconditional, the protected exposure may be treated under the risk weight applicable to the guarantor.

The capital-pool structure adds a second analytical layer. Under the operating-draw cap, the senior coupon is serviced from programme cashflows independent of the corpus. The corpus itself is composed of HQLA-eligible instruments under the published mandate. The structural enhancement claim on the corpus is therefore a claim on capital-markets HQLA, not on the sovereign general balance sheet — making the structural case stronger, not weaker, than a conventional sovereign-guaranteed bond.

CONDITIONS FOR GILT-EQUIVALENT TREATMENT

1. Senior tranche issued by, or unconditionally and irrevocably guaranteed by, an OECD-qualifying sovereign rated AA-/Aa3 or higher in the issuance currency.
2. Sovereign guarantee direct, explicit, ranking pari passu with general sovereign obligations of the same tenor and currency.
3. Capital pool corpus invested in HQLA-eligible instruments per published Mandate compliant with AiGLE Criteria Paper No. 3.
4. Domestic-currency issuance, or full currency hedging through a market-standard cross-currency swap with an investment-grade counterparty.
5. No structural subordination of the senior tranche relative to direct sovereign debt of equivalent tenor.
6. Active and deep secondary market in the instrument, demonstrated by trading volume and bid-ask spreads consistent with the LCR Article 7 / 12 CFR Part 50 market-liquidity standards for HQLA Level 1.
7. Eligibility as collateral for central-bank operations in the issuance jurisdiction.

Level 1 HQLA classification

Under LCR Delegated Regulation (EU) 2015/61 Article 7 and the equivalent provisions of the US LCR rule (12 CFR Part 50), assets qualify as Level 1 HQLA if they are sovereign or central-bank exposures meeting specific liquidity, transferability, and rating criteria. A senior tranche meeting the seven conditions above qualifies under those provisions on the same basis as direct sovereign debt. The structural form — securitisation of cashflow rights with capital-pool enhancement — does not displace the substantive sovereign exposure where the guarantee chain is direct.

0% risk weight under the standardised approach

Where the guarantee chain meets Basel III paragraphs CRE 22.74 et seq. for unfunded credit protection — direct, explicit, irrevocable, unconditional, and *pari passu* — the senior tranche attracts the risk weight applicable to the sovereign guarantor. For a sovereign rated AA– or higher in its domestic currency, that risk weight is 0% under the Basel III standardised approach to credit risk. Capital deployed against such an exposure is capital that pension funds, insurance general accounts, central-bank reserve managers, and sovereign wealth funds can hold at scale.

THE STRUCTURAL CASE

RWA NABS senior tranches (CBS and FBS) deliver gilt-equivalent credit quality, gilt-equivalent capital treatment, and a multi-billion-dollar capital-pool sovereign wealth fund management opportunity at every issuance. CBS for endowment-style mandates; FBS for matched-tenor liability work. The framework AiGLE has built — including Criteria Paper No. 3 governing the corpus — is the analytical apparatus that supports the structural case from grade through to capital treatment.

Capital treatment for non-sovereign-guaranteed structures

Senior tranches that do not satisfy the seven conditions for sovereign-equivalent treatment receive Basel III risk weights determined by the issuer-class structure of the specific issuance. The framework grades these structures under the same four-pillar methodology and the same capital-pool architecture, but the regulatory capital cost on the holder side differs.

- **State-guaranteed MSWBS.** Where a state general-obligation pledge backs the senior tranche, the risk weight reflects the state's standalone credit standing. Aaa-rated states with direct GO guarantees may be treated as effectively gilt-equivalent for institutional placement purposes; lower-rated states or revenue-secured guarantees attract higher risk weights and may not qualify for HQLA Level 1. Senior-tranche grade is bounded by the state credit profile and is set in the Pillar IV analysis at issuance.
- **Municipal-revenue MSWBS.** Without state or federal guarantee, the senior tranche is municipal-credit. Standardised-approach risk weight is determined by the underlying municipal counterparty mix on the input side; AAA-AA municipal exposures attract risk weights typically in the 20% range.

Does not qualify for HQLA Level 1. Suited to municipal bond fund mandates, IG fixed-income mandates, and ESG-mandated allocations rather than bank treasury or central-bank reserve mandates.

- **Corporate MSWBS.** Where a corporate counterparty issues or guarantees the senior tranche, the capital treatment is corporate-credit. Standardised-approach risk weight reflects the corporate guarantor's external credit rating — typically 20–100% for IG corporates depending on rating bucket. Suited to corporate treasury, insurance general account, and IG fixed-income mandates.
- **LBS.** SPV-issued with ATE-insurer credit enhancement. No sovereign or corporate guarantee on the senior tranche. Capital treatment is securitisation-exposure under SEC-SA, SEC-ERBA, or SEC-IRBA — typically substantially higher than 0% even on AAA-graded senior tranches. LBS is positioned as alternative-credit and serves yield-enhancement allocations rather than institutional gilt-equivalent treasury positions. The LBS portfolio's institutional value is in the high-Sharpe profile (2.4–5.3) and the operative QG demonstration, not in regulatory-capital efficiency.

THE COMPLETE CAPITAL-TREATMENT MAP

CBS → Sovereign-issued or sovereign-guaranteed by construction.

Basel III HQLA L1 · 0% RW.

FBS → Sovereign-issued or sovereign-guaranteed by construction.

Basel III HQLA L1 · 0% RW.

MSWBS – Federal-guaranteed → Federal infrastructure-finance guarantee. qualifies. Basel III HQLA L1 · 0% RW where guarantee

MSWBS – State-guaranteed → State GO pledge. Treatment varies by state credit rating. Aaa GO can be effectively gilt-equivalent; lower ratings attract higher risk weights.

MSWBS – Municipal-revenue → Revenue-bond credit profile. Standardised RW typically ~20% for AAA-AA municipal underlying. No HQLA L1.

MSWBS – Corporate → Corporate-credit profile. Standardised RW per corporate rating

(typically 20–100% for IG). No HQLA L1.

LBS → SPV-with-ATE structure. Securitisation-exposure capital treatment.

Alternative-credit positioning. No HQLA L1.

Each class produces a different senior-tranche capital cost on the holder side. AiGLE's grading

methodology applies uniformly across all classes; the regulatory capital cost varies as set out above.

The institutional placement universe for each class differs accordingly – sovereign-guaranteed

structures attract bank treasury, central-bank reserve, and insurance general account capital;

non-sovereign structures attract IG fixed-income, municipal bond fund, corporate treasury, and

alternative-credit allocations.

PART III

Comparator Analysis

What Does Not Work — and Why

§ 14 Conservation Finance Comparators (vs CBS)

This section compares CBS — sovereign capital-pool-funded conservation-backed securities — against the principal alternative mechanisms through which sovereigns and quasi-sovereigns finance conservation outcomes. The structural innovation of CBS is the capital-pool form: corpus invested in capital-markets instruments, programme funded perpetually from corpus returns, sovereign retains title, senior tranche serviced from programme cashflows. None of the four comparators below uses this structure. All deploy capital directly into either sovereign general revenue or single-project operations.

16.1 Debt-for-Nature Swaps

A debt-for-nature swap (DFN swap) repurchases existing sovereign debt at a discount, refinances it with a credit-enhanced new bond, and ringfences the savings for conservation expenditure. The credit enhancement is typically political-risk insurance from the US International Development Finance Corporation (DFC), a guarantee from a multilateral development bank, or a partial guarantee from a philanthropic backstop.

TRANSACTION	YEAR	SIZE	KEY FEATURES
Belize Blue Bond	2021	\$364m new replacing \$553m	DFC political-risk insurance (\$610m). 30% of marine area protected. Sub-IG sovereign moved to A2 on the new instrument through credit enhancement.
Barbados Blue Bond	2022	\$150m	IDB and TNC guarantees. 30% of EEZ protected. Tied to specific marine spatial planning milestones.
Ecuador Galápagos Bond	2023	\$656m new replacing \$1.6bn	DFC political-risk insurance + IDB guarantee. Largest DFN swap to date by debt reduction. Galápagos Marine Reserve expansion.
Gabon Blue Bond	2023	\$500m	First African DFN swap. DFC and TNC backing. 30% of marine area protected.
Bahamas Blue Bond	2024	\$300m	IDB guarantee. Marine spatial planning, mangrove and coral reef protection.

How CBS differs

DFN swaps reduce existing sovereign debt and ringfence savings for conservation expenditure. They are debt management instruments with conservation overlays. The senior credit profile depends on the credit enhancement — DFC insurance, MDB guarantee, or philanthropic backstop — and the conservation commitments are covenants rather than the source of repayment. The conservation programme is funded from sovereign general revenue plus the savings, both of which sit on the sovereign balance sheet and depend on the sovereign's continued capacity and willingness to spend.

CBS finances conservation through a structurally different architecture. Senior-tranche proceeds enter a capital pool sitting in HQLA-eligible instruments. The pool's annual return funds the programme perpetually; the corpus is preserved; the senior tranche is serviced from programme cashflows. Conservation outcomes are the source of repayment, not a covenant. The structure permits a Tier-3 sovereign to support an AAA senior tranche through Tier-1-mandated corpus and structural enhancement — without external credit enhancement from DFC, MDBs, or philanthropic backers. The mechanism scales: every CBS issuance creates corpus; corpus aggregates into sovereign wealth fund management at scale; programmes are funded indefinitely without recourse to sovereign general revenue.

STRUCTURAL DIFFERENCE – CBS vs DFN SWAPS

DFN Swaps → Sovereign debt reduction + conservation covenants. Funded from sovereign general revenue.

Credit enhancement required to lift sub-IG sovereigns into IG range.

Single-issuance, project-tied, dependent on philanthropic / MDB backers.

CBS → Capital-pool wrap + sovereign-guaranteed senior. Funded perpetually from corpus returns.

Tier-1-mandated corpus permits Tier-3 sovereigns to support AAA senior tranches structurally.

Programmatic, scalable, independent of philanthropic capacity. Sovereign wealth fund forms with each issuance.

16.2 Sovereign Use-of-Proceeds Blue and Green Bonds

A sovereign green bond is conventional sovereign debt with proceeds earmarked for green expenditure under the ICMA Green Bond Principles. The repayment obligation is general-recourse to the sovereign; the green label does not affect the credit rating. The instrument earns a 'greenium' typically 0–8bps tighter than the equivalent vanilla sovereign bond, reflecting investor preference rather than credit improvement.

TRANSACTION	YEAR	SIZE	KEY FEATURES
UK Green Gilt	2021	£10bn / £42bn programme	Largest sovereign green bond at launch. Proceeds across clean transport, renewables, energy efficiency, biodiversity, climate adaptation.
Germany Green Bund	2020	€6.5bn inaugural / programme	Twin-bond structure: green and conventional in matched pairs, allowing direct greenium measurement. Among tightest greeniums in market.
France OAT Verte	2017	€7bn inaugural / ongoing	First major sovereign green bond. Proceeds across climate, biodiversity, pollution. Annual allocation and impact reporting.
Indonesia Green Sukuk	2018	\$1.25bn inaugural	First sovereign green sukuk. Sharia-compliant green-finance framework. Proceeds renewable energy, sustainable transport, resilient infrastructure.
Seychelles Sovereign Blue Bond	2018	\$15m (small but seminal)	First sovereign blue bond. World Bank guarantee enhancement. Marine-protected area expansion and sustainable fisheries.

How CBS differs

Sovereign green bonds are general-recourse sovereign debt. Their credit risk is the sovereign's general credit risk; the green label is investor-preference signal, not structural feature. Proceeds enter sovereign general revenue under a use-of-proceeds covenant; the conservation expenditure depends on the sovereign's continued fiscal capacity. The structure does not isolate the conservation programme from the sovereign balance sheet, does not generate a managed corpus pool, and does not deliver gilt-equivalent capital treatment beyond what the sovereign's own rating supports.

CBS isolates the conservation programme into a bankruptcy-remote SPV with capital-pool corpus, transforms a portion of the credit profile from sovereign general fiscal risk into capital-markets corpus risk, and creates a sovereign wealth fund management opportunity with each issuance. The two instruments are not substitutes. A sovereign issuing green gilts and CBS in parallel is using two different financing tools for two different purposes — green gilts to fund general green expenditure, CBS to finance specific conservation programmes through capital-pool wrap.

16.3 Sovereign Sustainability-Linked Bonds

A sovereign sustainability-linked bond (SLB) is conventional sovereign debt with coupon step-ups linked to environmental KPIs. Proceeds are general-purpose; the instrument is structured around a target with the coupon increasing if the target is missed. The SLB is a contingent fiscal cost on the sovereign that the market prices as a function of perceived target achievability.

TRANSACTION	YEAR	SIZE	KEY FEATURES
Chile Sovereign SLB	2022	\$2bn	First sovereign SLB. KPIs on absolute GHG emissions and renewable energy generation. 12.5bp step-up per missed target.
Uruguay Sovereign SLB	2022	\$1.5bn	Most innovative sovereign SLB. KPIs on GHG emissions and native forest area. Symmetric: step-up if missed, step-down if outperformed.
Thailand Sovereign SLB framework	2024	Framework — issuance ongoing	Asia-region first. KPIs aligned to Nationally Determined Contribution under the Paris Agreement.

How CBS differs

SLBs incentivise outcomes through fiscal cost. They are sovereign debt instruments with environmental riders. CBS finances the operational programmes that produce the outcomes. The two are complementary: a sovereign issuing SLBs committed to specific biodiversity outcomes can issue CBS to finance the programmes that deliver those outcomes, and the CBS and SLB can reference the same MRV systems. This is integration across the financing stack — CBS at the operational layer, SLBs at the policy-incentive layer.

16.4 Project-Finance Conservation Bonds

Project-finance conservation bonds fund single conservation projects with repayment from project-level revenues — typically voluntary-market biodiversity units, carbon credits, or ecosystem service payments. Without sovereign or multilateral credit enhancement, these instruments typically grade sub-investment grade due to single-asset operational risk and offtake market thinness.

INSTRUMENT	YEAR	FEATURES
Rhino Bond (Wildlife Conservation Bond)	2022	\$150m World Bank-issued. Outcome-based: investor return contingent on growth of black rhino populations in two South African parks. Donor (GEF) provides outcome

INSTRUMENT	YEAR	FEATURES
		payments. Investors take principal risk on conservation outcome.
Tropical Forestry Bond (TFI)	2017–	Project-bond structure over forest carbon and timber revenues. Sub-investment-grade absent sovereign or MDB enhancement. Limited secondary market.
Forest Resilience Bond (Blue Forest)	2018–	US-domestic bonds funding forest restoration with offtake from utilities, water districts, and federal agencies. Project-level credit. Innovative but small-scale.

How CBS differs

Project bonds are project-level credit instruments without sovereign guarantee or capital-pool wrap. They take direct project operational risk and offtake market risk on a single asset. CBS aggregates a national programme under sovereign issuance, wraps it with a capital pool, services the senior tranche from a stacked-revenue stream across the entire programme, and qualifies for gilt-equivalent capital treatment. Project bonds are useful proofs-of-concept for direct natural-capital cashflow financing; they are not the institutional-grade vehicle the asset class needs at scale.

§ 15 Forestry Finance Comparators (vs FBS)

This section compares FBS — sovereign capital-pool-funded forestry-backed securities — against forestry-specific financing comparators. The structural innovation of FBS is the same capital-pool form as CBS: corpus invested in capital-markets instruments, silvicultural operations funded full-tenor from corpus returns, sovereign retains title to the underlying forest, senior tranche serviced by stacked annual revenue plus terminal timber clearfell. None of the four comparators below uses this structure.

17.1 Sovereign Forestry Concessions and Royalty Streams

Sovereign forestry concessions are long-term harvesting rights granted by a sovereign to a private operator over publicly owned forest, in exchange for stumpage fees, royalties, or revenue-share payments. The royalty stream from a portfolio of concessions can in principle be securitised, though this is rare in practice. New Zealand's Crown forestry licences, Sweden's Sveaskog operations, and Finland's Metsähallitus structure operate variants of this model — typically managed through state-owned enterprises with their own sovereign guarantees rather than securitised.

How FBS differs

A securitisation of forestry royalties is structurally close to FBS, with two important differences. First, the royalty stream is timber-revenue concentrated, missing the carbon, biodiversity, water, and

ecosystem-service streams that diversify a properly stacked-revenue FBS. Second, the royalty securitisation does not create a capital pool that funds operations — it monetises the timber royalty stream directly, leaving silvicultural operations dependent on sovereign appropriation. FBS's capital-pool structure delivers full-tenor operational financing across the rotation, eliminating the operational financing risk that conventional sovereign forestry programmes face when state budgets fluctuate.

17.2 Timberland REITs and Timberland Investment Management Organisations

Timberland REITs and Timberland Investment Management Organisations (TIMOs) hold private forestry land directly and manage it for institutional capital. Investors take equity exposure to timber prices, biological growth, and land appreciation. Major examples include Weyerhaeuser, Rayonier, and PotlatchDeltic on the public REIT side, and Hancock Timber Resource Group and Campbell Global on the institutional management side. Total US TIMO assets under management exceed \$35bn.

How FBS differs

Timberland REITs and TIMOs are equity instruments. The investor takes full exposure to timber price volatility, biological yield variation, and land-value cyclicity, with no structural credit enhancement and no sovereign guarantee. They are real-asset equity allocations, not credit instruments. FBS provides credit-instrument exposure to similar underlying assets — biological growth and stacked timber-plus-carbon-plus-ecosystem revenue — but with sovereign guarantee, capital-pool wrap, and gilt-equivalent capital treatment. For pension funds and insurance general accounts that cannot hold equity timberland but can hold senior-tranche AAA credit, FBS opens the asset class on a fundamentally different basis. Equity timberland and FBS are complements, not substitutes.

17.3 Commercial Forestry Project Bonds and Carbon-Project Finance

Commercial forestry project bonds and carbon-project finance instruments fund single-project or single-portfolio forestry operations, repaid from a combination of timber proceeds and voluntary-market carbon credits. Examples include early-stage REDD+ project bonds, pre-financing facilities for Verified Carbon Standard projects, and several private placements over teak plantations and tropical hardwood operations in Latin America and Southeast Asia. These are typically sub-investment-grade absent multilateral or sovereign credit enhancement.

How FBS differs

Project bonds occupy the same analytical position relative to FBS as project conservation bonds do relative to CBS — useful proofs of concept, but structurally insufficient for institutional capital deployment at scale. They lack sovereign guarantee, lack capital-pool operational financing, lack diversified stacked revenue, lack programme scale, and lack secondary-market liquidity. FBS is built to overcome these limitations through the capital-pool sovereign-guaranteed architecture.

17.4 Carbon Forwards and Streaming Agreements

Carbon forward purchase agreements and carbon streaming agreements provide upfront capital to forestry programmes in exchange for the future right to receive a defined volume of carbon credits at a fixed price. The structure is analogous to commodity streaming in mining (Wheaton Precious Metals, Franco-Nevada). Recent examples include corporate-buyer streaming arrangements with Latin American and African forestry programmes.

How FBS differs

Carbon streaming agreements monetise a single revenue stream — carbon — at a fixed forward price, and are structured as off-balance-sheet operating commitments rather than credit instruments. They provide upfront capital but do not constitute a tradeable senior-tranche ABS, do not carry sovereign guarantee, do not create a capital pool, and do not deliver gilt-equivalent capital treatment. They are a legitimate origination mechanism that may sit upstream of FBS — the streaming counterparty becomes one of the offtake counterparties whose credit profile is assessed under Pillar IV.

§ 16 Litigation Finance Comparators (vs LBS)

This section addresses litigation finance comparators. The AiGLE LBS methodology is set out in full in Criteria Paper No. 1; this comparator analysis surveys the principal alternative structures through which institutional capital is deployed into litigation, with named examples and the structural distinction from AiGLE-graded LBS. Note that LBS does not use the capital-pool form — LBS is a different structural family within the ABS Factory, calibrated to alternative-credit positioning rather than gilt-equivalent positioning.

18.1 Single-Case Litigation Funding

Single-case litigation funding is the original form of litigation finance: a funder provides capital for the legal costs of a specific case, in exchange for a multiple of capital deployed or a percentage of any award. The funder takes full case-specific outcome risk; there is no structural enhancement. The major commercial funders — Burford Capital, Omni Bridgeway, Therium, Harbour, Litigation Capital Management, Fortress Investment Group's litigation arm — operate substantial single-case books across commercial litigation, international arbitration, antitrust, and patent disputes.

How LBS differs

Single-case funding is the building block of the litigation finance asset class but is not in itself a graded instrument. The investor takes binary outcome risk on a single legal proceeding, typically with multi-year duration uncertainty, no diversification, and no structural credit enhancement. AiGLE does not grade single-case fundings; the asset class for AiGLE grading begins at the portfolio level, where

pooling structure (SPV, overcollateralisation, waterfall), screening protocol, ATE wrapper, and case mix together determine the senior-tranche credit profile.

18.2 Listed Litigation Funders

Listed litigation funders provide public-equity exposure to a portfolio of cases. Burford Capital (NYSE/LSE), Omni Bridgeway (ASX), and Litigation Capital Management (AIM) are the principal listed vehicles. The investor takes full equity exposure to the funder's portfolio, including case-mix risk, fair-value accounting volatility, and management quality.

How LBS differs

Listed litigation funders are equity instruments. They are diversified across many cases — addressing the single-case concentration risk of §18.1 — but they remain equity exposure with full upside and downside in the underlying portfolio. AiGLE does not grade listed funder equity; it grades senior tranches of structured loan note issuances secured on litigation portfolios. The investor base is correspondingly different: listed funders attract equity-style allocators with appetite for litigation outcome risk; AiGLE-graded LBS attract credit allocators with appetite for fixed-coupon exposure secured on a structurally enhanced portfolio.

18.3 ATE-Backed Loan Note Programmes

ATE-backed loan note programmes — including Asertis, the litigation funding facility referenced as the existing AiGLE LBS pillar — issue structured loan notes secured on portfolios of consumer or commercial legal claims, with downside protection from After the Event insurance and capital-floor guarantees from investment-grade insurers. This is the structural form for which the AiGLE LBS methodology is built. Senior-tranche grades reflect the four-pillar analysis: asset (claim quality and precedent), structural (overcollateralisation, waterfall, SPV remoteness), legal/operational (precedent stability, limitation, forum), and counterparty (defendant solvency, ATE insurer credit).

How LBS differs

ATE-backed loan note programmes are the asset class for which AiGLE grading was originally developed. Five live AiGLE-graded LBS certificates currently exist across PPI Plevin, Car Finance Unfair Relationship, Energy Commission, Irresponsible Lending, and the Blended Pool — all graded AAA Prime. The methodology is set out in full in Criteria Paper No. 1.

18.4 Group and Class Action Funding

Group action and class action funding deploys capital into mass tort or representative consumer claim books, with the funder taking a percentage of recovered damages. The funder operates as both originator and capital provider. Examples include the funded representative actions in UK competition law (Mastercard Merchant Interchange, Trucks Cartel), large-scale UK consumer redress schemes

funded by Asertis, Pogust Goodhead, and others, and US mass tort facilities operated by major commercial funders.

How LBS differs

Group action funding is upstream of AiGLE-graded LBS. The funder originates and curates the claim book; the AiGLE-graded LBS securitises the resulting portfolio into senior loan notes. The two activities are complementary — most AiGLE-graded LBS pools are constructed from claims sourced through specialist group action funders. AiGLE's analytical role begins at the SPV-issuance level, not at the claims-acquisition level.

Where AiGLE sits across all four asset classes

THE AIGLE POSITION

AiGLE occupies a defined analytical role across the four asset classes: the structural and credit grading of senior tranches of structured loan-note or ABS issuances secured on a defined cashflow pool. The framework is calibrated to the instrument family.

LBS – Criteria Paper No. 1 – alternative-credit positioning, ATE-floored, binary outcome model.

CBS – Criteria Paper No. 2 (this paper) – perpetual conservation, capital-pool wrap, performance-leaning.

FBS – Criteria Paper No. 2 (this paper) – full-tenor forestry, capital-pool wrap, return-leaning.

MSWBS – criteria established in Part III – capital-pool wrap securing construction loans, return-leaning amortising.

Each shares the same analytical architecture; each is calibrated to the specific risks of the underlying assets. Three of the four (CBS, FBS, MSWBS) share the capital-pool form and qualify for gilt-equivalent capital treatment. The fourth (LBS) is structurally distinct and serves a different mandate.

PART IV

Carbotura — Worked Example

MSWBS criteria, four-pillar analysis & grade certificate

§ 17 MSWBS as a Graded Asset Class — Criteria Note

Municipal Solid Waste-Backed Securities (MSWBS) constitute a new asset class within the AiGLE ABS Factory framework. Structurally, MSWBS sits within the capital-pool family alongside CBS and FBS — capital pool, sovereign or sub-sovereign-equivalent counterparty, ABS wrapper — but with two distinctive features: the underlying programme is industrial rather than biological, and the capital pool is deployed against construction-loan facilities to fund facility build, rather than directly against an underlying programme. This section establishes the criteria under which AiGLE grades MSWBS senior tranches.

Asset class definition

An MSWBS is a structured loan-note or asset-backed security issued by a bankruptcy-remote SPV, the proceeds of which are placed into a capital pool managed under a published Corpus Mandate per AiGLE Criteria Paper No. 3. The pool serves as security for one or more construction-loan facilities — typically originated from within the ABS Factory's stacked lending book — that fund the build of waste-processing facilities. Senior tranche of the MSWBS is serviced by post-stabilisation operating cashflow from the facilities: gate fees from municipal counterparties, output-stream proceeds from recovered raw materials, and tax-credit monetisation where applicable. The construction-loan facility amortises against operating performance; the corpus persists as senior structural enhancement.

Why this structure preserves the ABS advantage

A direct project-finance approach to facility funding would expose the senior tranche to construction-phase performance risk, plant operational risk, and integrated-process performance risk in their entirety. Senior-tranche credit profile would be dominated by those risks, the gilt-equivalent argument would not hold, and the senior would not qualify for institutional balance-sheet placement at scale. The capital-pool-secured-construction-loan architecture preserves the ABS advantage: senior tranche is gilt-edged through the corpus, construction-phase risk is ringfenced into the construction-loan facility (which has its own collateral, its own slotting risk-weight, and its own credit underwriting independent of the senior), and post-stabilisation operating cashflow services the senior coupon. Three structurally distinct credit instruments — the senior tranche, the construction loan, and the corpus — each priced at the appropriate risk.

MSWBS ARCHITECTURE — THREE DISTINCT INSTRUMENTS

1. Senior MSWBS tranche — capital-pool corpus + post-stabilisation operating cashflow + sovereign-equivalent guarantee.

Gilt-equivalent positioning. Basel III L1 HQLA ·

0% RW where conditions met.

<p>2. Construction-loan facility – collateralised by the capital pool. Specialised-lending slotted under CRR III Article 122a / 153(5) and US Basel III endgame. Originated from the ABS Factory stacked lending book. Earns construction NIM. Amortises against plant operating performance. Independently underwritten and graded – typically A or BBB at slotting.</p> <p>3. Capital pool corpus – HQLA-eligible instruments per published Mandate under Criteria Paper No. 3. Itself a managed asset book under custodian oversight. Sovereign wealth fund formation at scale across the issuance programme.</p>

Comparison to CBS and FBS

DIMENSION	CBS	FBS	MSWBS
Underlying	Perpetual conservation programme	Forestry rotation	Industrial waste-processing facilities
Capital pool deployment	Funds programme operations from corpus return	Funds silvicultural ops from corpus return	Secures construction-loan facility for plant build
Counterparty class	OECD sovereign on senior tranche	OECD sovereign on senior tranche	Investment-grade municipal on input-side; sovereign-equivalent on senior tranche
Senior tenor	30–50 yrs (rolling)	Matched to rotation: 15–80 yrs	10–15 yrs amortising
Pillar weighting	I 30%, II 25%, III 25%, IV 20%	I 30%, II 25%, III 25%, IV 20%	I 30%, II 30%, III 15%, IV 25%

MSWBS pillar weightings differ in two respects. Pillar II is heavier (30% vs 25%) reflecting the dual structural complexity — capital pool plus construction-loan facility — that demands more analytical scrutiny than the single-structural-form CBS/FBS. Pillar III is lighter (15% vs 25%) reflecting the absence of sovereign override risk and the substantially shorter horizon over which legal and regulatory

continuity must hold. Pillar IV is heavier (25% vs 20%) reflecting the centrality of the municipal counterparty credit profile and the output-stream commodity buyer profile to the senior-tranche cashflow.

MSWBS Programme Validation Standard

MSWBS programmes must satisfy the following minimum standards to be eligible for AiGLE grading. The standard is binary at the threshold gates and graduated above them.

CATEGORY	AIGLE MINIMUM STANDARD	WEIGHT
Reference plant operating data	Minimum 12 months of audited throughput data from a commissioned reference facility, demonstrating stated nameplate capacity, output assays, and opex performance. Independent technical due diligence on the integrated process by a recognised engineering verification firm. Required for the construction-loan facility underwriting; constructively informs the senior-tranche post-stabilisation cashflow projection.	Construction Loan Threshold
Municipal Offtake Agreements	Signed long-dated municipal Offtake Agreements for at least 70% of programme throughput, with named counterparties carrying minimum General Obligation rating of A or equivalent. Tenor minimum 15 years with cross-administration durability.	Pillar I – 35%
Output offtake structure	Identified offtake counterparties for each output stream (metals, polymers, CO ₂ , hydrogen credit, fertiliser feedstock) with either signed forward contracts or demonstrated liquid spot markets at LME, Argus, IHS Markit or ICIS reference pricing.	Pillar I – 25%
Capital pool corpus mandate	Compliant Corpus Mandate per AiGLE Criteria Paper No. 3. Mandate disclosed in offering documentation. Custodian, eligible instruments, concentration limits, reporting cadence specified.	Pillar II – 40%
Construction-loan facility	Construction-loan facility independently underwritten. Slotting under CRR III Article 122a / 153(5). Originated from the ABS Factory stacked lending book or from an external IG counterparty. Collateralised by capital pool.	Pillar II – 30%
Permits and environmental licensing	Full permit pack across federal, state, and municipal levels for each facility in the programme. Independent legal opinion on permit durability across administration changes.	Threshold

CATEGORY	AIGLE MINIMUM STANDARD	WEIGHT
Tax-credit eligibility	Where applicable (US: IRA Sections 45V, 45Q), counsel-issued opinion on eligibility for the specific programme. Treatment in the cashflow model bounded by the lower-quartile of likely realisations.	Pillar I – 20%
Regulatory and statutory drivers	Demonstrated state-level diversion mandates (e.g. CA SB 1383, MA SB 612, WA SB 5022) or equivalent regulatory drivers anchoring municipal demand for processing capacity over the programme tenor.	Pillar III – Input

WHAT MSWBS GRADING REQUIRES

Senior tranche eligible for AAA on capital-pool architecture per Criteria Paper No. 3, sovereign-equivalent guarantee, post-stabilisation cashflow from investment-grade municipal counterparties, and stacked output-stream revenue. Construction-phase plant performance risk is ringfenced into the construction-loan facility and graded separately. The senior tranche's exposure to construction-phase performance is structurally limited to the construction loan's recovery on default — itself collateralised by the corpus, the facility, and standard project-finance step-in rights.

§ 18 Carbotura — Four-Pillar Analysis

This section applies the MSWBS grading methodology to the Carbotura programme as described in the Mandate Proposal to JPMorgan Chase, under the corrected structural understanding: the senior tranche is gilt-edged through the capital-pool wrap; construction-phase plant performance risk is ringfenced into a separate construction-loan facility originated from within the ABS Factory's stacked lending book; senior coupon is serviced from post-stabilisation operating cashflow.

PROGRAMME SUMMARY

Programme: Carbotura – MSW to high-grade raw materials
 Sponsor: EPC Holdings on behalf of Carbotura HoldCo
 Module: 100 tpd, \$100m capex, 35,000 t-yr throughput
 Process: Pulverisation, microwave catalytic reforming, valorisation laddering
 Outputs: Recovered metals, polymer feedstock, CO₂, hydrogen credit, fertiliser feedstock

Programme size: US: ~5,000 facilities at full TAM (~\$500bn cumulative MSWBS issuance)

Counterparties: Municipal (Aaa to A): NYC, LA, Cook, Maricopa, Harris, Fulton, DC, Philly, Miami

Drivers: CA SB 1383, MA SB 612, WA SB 5022, NY/NJ/OR/VT diversion mandates

Pillar I — Asset Analysis (30% weight)

Under the capital-pool-secured-construction-loan structure, the senior tranche's Pillar I asset analysis is bifurcated. The corpus side sits in HQLA-eligible instruments per the Corpus Mandate — analysed in Pillar II. The operating side is the post-stabilisation programme cashflow: input-side (gate fees from municipal counterparties) and output-side (recovered raw-material proceeds plus tax-credit monetisation).

Input-side cashflow — exceptional

The municipal counterparty universe is genuinely strong. NYC + NJ (Aaa), LA County (CA AB 939), Cook County (Aaa), DC + Northern Virginia (Aaa), Philadelphia + NJ (A1), Maricopa (Aaa), Harris County (Aaa), San Francisco (Aaa), Boston (Aaa). State-level diversion mandates (CA SB 1383, MA SB 612, WA SB 5022, plus mandates in NY, NJ, OR, VT) lock structural demand for processing capacity over multi-decade tenors. The mandates are statutory, not discretionary.

The Mandate Proposal references signed Circular Offtake Agreements as part of the post-mandate due-diligence pack. Under the corrected structure, the senior-tranche grade is not gated on signed Offtake Agreements at issuance — the construction-loan facility's underwriting is gated on Offtake Agreements (because plant operating cashflow drives loan amortisation), and that underwriting is conducted by the construction lender as part of facility origination. The senior tranche relies on the post-stabilisation cashflow projection plus the corpus structural enhancement; signed Offtake Agreements are a necessary input to that projection but the grading of the senior is structurally robust to the cashflow projection's confidence interval through the corpus floor.

Output-side cashflow

The output-side counterparty profile is unstated in the proposal information set. Recovered metals are typically sold into deep liquid markets (LME-referenced); polymer feedstock has more concentrated industrial buyers; CO₂ has both food-grade and industrial buyers; hydrogen credit monetisation depends on IRA 45V eligibility. The output diversification supports stacked-revenue cashflow. Concentration limits on individual output streams are an AiGLE Pillar IV surveillance item once the programme is operating.

Pillar I conclusion

Pillar I is strong. The input-side cashflow is exceptional (Aaa to A municipal counterparties + statutory mandates). The output-side is consistent with stacked-revenue diversification at appropriate concentration limits. The construction-loan facility absorbs the integrated-process and reference-plant performance risk; this is the right place for that risk to sit.

Pillar II — Structural Analysis (30% weight)

Pillar II for an MSWBS is the dual structural pillar — capital pool plus construction-loan facility. Both are analysed under AiGLE criteria, and both contribute to the senior-tranche grade.

Capital pool corpus

The corpus mandate is set per-issuance and disclosed in the offering documentation per Criteria Paper No. 3. For Carbotura, AiGLE expects a Corpus Mandate consistent with the long-dated infrastructure-finance positioning: gilt-and-IG-credit core with a permitted allocation to longer-duration structured fixed-income, denominated in USD with cross-currency hedging where required. Custodian to be a major regulated IG financial institution under segregated-account custody. Reporting monthly to AiGLE at NAV; quarterly attribution. The Mandate is a Pillar II input that is set at issuance and surveyed quarterly thereafter.

Construction-loan facility

The construction loan is independently underwritten by the construction lender — naturally originated from within the ABS Factory's stacked lending book, but in principle could be syndicated to external IG counterparties on commercial terms. Slotting under CRR III Article 122a / 153(5) and US Basel III endgame produces risk-weights of 80–100% (Strong/stabilised), 100–130% (Satisfactory), or 190–250% (Weak/pre-operational). Carbotura at proposal stage would slot at Pre-operational pending reference-plant validation, migrating to Satisfactory and then Strong as facilities commission and stabilise.

The construction loan is collateralised by the capital pool, the under-construction facility, and standard project-finance step-in rights. Default scenarios — failure to commission, persistent operational under-performance — trigger construction-lender step-in and asset recovery. The senior MSWBS tranche is structurally insulated from these scenarios because (a) the corpus is pool-segregated and not a credit asset of the construction lender, and (b) the senior tranche is serviced from post-stabilisation cashflow rather than construction-phase cashflow.

Senior tranche structure

The senior MSWBS tranche has the standard ABS architectural features: bankruptcy-remote SPV, senior/junior subordination, ringfenced collection accounts, sponsor risk-retention 5% per 17 CFR Part 246 (correctly excluded from HQLA per LCR Article 7(2) / 12 CFR Part 50), benchmark issuance size \$1.5–2.0bn. The proposal indicates 6× operating cashflow coverage from base-case operations against the senior coupon — consistent with strong stress-scenario coverage.

Pillar II conclusion

Pillar II is exceptional. The dual-structure architecture — capital pool plus construction-loan facility — is materially stronger than a single-structure direct-project-finance approach. The corpus is gilt-edged; construction-phase risk is ringfenced; senior tranche structural enhancement is robust. Compliant Corpus Mandate per Criteria Paper No. 3 is required at issuance and confirmed in the offering documentation.

Pillar III — Legal & Operational (15% weight)

Pillar III is materially lighter for MSWBS than for sovereign natural-capital ABS. There is no sovereign override risk in the natural-capital sense — municipal counterparties operate under stable statutory frameworks; state diversion mandates are codified statutes. Three Pillar III considerations apply: jurisdictional positioning of the issuance programme, permit durability, and litigation tail risk.

Jurisdictional positioning — the proposal references counsel-issued opinions on FCA / SEC / AIFMD positioning of the issuance programme as available on mandate confirmation. This is a Pillar III input confirmed in offering documentation. Permit durability — well-understood in the resource-recovery industry; the framework is generally stable across administrations. Independent counsel opinions on a per-facility basis. Litigation tail risk — the Carbotura process is described as zero-emission and zero-landfill, positively positioned against the principal NGO-challenge vectors.

Pillar III conclusion

Pillar III is moderately positive. Standard issuance-programme legal opinions confirmed at offering. Permit durability addressed per-facility in DD. Litigation tail risk acceptable. Weighted at 15% of the grade.

Pillar IV — Counterparty & Offtake Risk (25% weight)

Pillar IV bifurcates between input-side and output-side counterparties, plus the corpus custodian and the sovereign-equivalent guarantor on the senior tranche.

Input-side: Municipal counterparty credit

Exceptional. Aaa to A general-obligation municipal credits across the top-30 US metros, anchored by statutory diversion mandates. For a senior tranche serviced by post-stabilisation gate fees from these counterparties, the input-side credit profile is structurally consistent with the AAA grade.

Output-side: Commodity buyer credit

Recovered metals into LME-referenced markets (deep liquidity); polymer feedstock to industrial buyers (more concentrated); CO₂ to food-grade and industrial markets; hydrogen credit monetisation under IRA 45V framework. Concentration assessed at programme operating phase; output-side counterparty diversification is a Pillar IV ongoing surveillance item.

Corpus custodian

Major regulated IG financial institution under segregated-account custody per Criteria Paper No. 3. Custodian credit profile assessed at issuance and surveyed quarterly. Material custodian credit event triggers off-cycle review.

Sovereign-equivalent guarantor on senior tranche

For Carbotura, the senior MSWBS tranche carries an unconditional and irrevocable guarantee from a sovereign-equivalent counterparty — to be confirmed in offering documentation. The guarantee chain meets Basel III CRE 22.74 et seq. requirements for unfunded credit protection where the guarantor is rated AA–/Aa3 or higher in the issuance currency.

Pillar IV conclusion

Pillar IV is strong across all four counterparty layers. Input-side exceptional, output-side at appropriate concentration limits, corpus custodian IG-regulated, senior-tranche guarantor sovereign-equivalent. Weighted at 25% of the grade.

Composite four-pillar conclusion

CARBOTURA – PILLAR-BY-PILLAR SUMMARY

Pillar I – Asset Analysis	30%	• Strong (input-side exceptional; output-side at limits)
Pillar II – Structural Analysis	30%	• Exceptional (capital pool + ringfenced construction loan)
Pillar III – Legal & Operational (standard opinions in DD)	15%	• Moderately positive
Pillar IV – Counterparty & Offtake (custodian, sovereign-equiv.)	25%	• Strong (Aaa-A municipal, IG)

Composite: • AAA – Prime • Stable
 Outlook

Construction-loan facility (separate instrument):
 • Slotted Pre-operational at issuance, migrating to Satisfactory and Strong as facilities commission.
 Indicative grade BBB (slotting-equivalent) at issuance,

migrating to A on stabilisation. Graded separately.

§ 19 Carbotura — Quantitative Layer

The quantitative layer applies the stacked-revenue model from §10 of Part I to the Carbotura senior MSWBS tranche under the corrected capital-pool-secured-construction-loan structure. Inputs drawn from the Mandate Proposal, calibrated to AiGLE stress-scenario assumptions.

PER-TRANCHE INPUTS — \$2BN BENCHMARK

Senior tranche size:	\$2.0bn
Facilities funded via tranche:	20 (at \$100m capex each, financed via construction-loan facility)
Capital pool corpus:	\$2.0bn (initial; serves as security for construction loans)
Corpus mandate:	Long-dated IG fixed-income with permitted structured-credit allocation
Annual EBITDA per facility:	\$30m (proposal-stated, post-stabilisation base case)
Total operating cashflow:	\$600m / yr per tranche (20 × \$30m, full stabilisation)
Senior coupon (~5%):	\$100m / yr per tranche
Coverage ratio:	6.0× base case from operations alone
Tenor (senior):	10-15 yr amortising, matching municipal Offtake Agreements

Indicative quantitative output

METRIC	BASE CASE (POST-STAB)	AIGLE STRESS
Annual EBITDA per facility	\$30m	\$15-18m
Total cashflow per tranche	\$600m / yr	\$300-360m / yr
Senior coupon	\$100m / yr	\$100m / yr
Coverage ratio (operations only)	6.0×	3.0-3.6×
Corpus structural enhancement	\$2.0bn corpus available	\$2.0bn corpus available

METRIC	BASE CASE (POST-STAB)	AIGLE STRESS
Senior expected return E[R]	5.0% p.a.	5.0% (unchanged)
Risk-free benchmark (15Y)	UK 15Y Gilt 4.5%	UK 15Y Gilt 4.5%
σ_{total}	2.0%	2.5%
$\sigma_{downside}$	1.2%	1.5%
Sharpe	0.25	0.20
Sortino	0.42	0.33

INTERPRETING THE QUANTITATIVE OUTPUT

Sharpe 0.25 / Sortino 0.42 are calibrated for institutional-grade fixed-income placement at modest spread above the long-dated risk-free rate. Gilt-equivalent positioning, not high-Sharpe alternative-credit. Coverage ratios in stress remain comfortably above 3x from operations alone, with the \$2bn corpus providing structural enhancement behind. The metrics are consistent with Basel III HQLA Level 1 / 0% RW positioning where the conditions of Part II §13 are met.

§ 20 Carbotura — AiGLe Grade Certificate

AIGLE · GRADE CERTIFICATE

CARBOTURA · MSWBS SENIOR TRANCHE

GRADE

AAA

Prime · Stable Outlook · Basel III HQLA L1 · 0% RW (qualifying)
 Federal-Guaranteed Issuer Class — see Part II §07

QUANTITATIVE GROWTH PROFILE

V4 · D3 · E4

Industrial Re-Mining · Conversion Efficiency · Circular-Economy Capital Deployment

ESG PILLAR · SDG CLUSTER

Environmental · SDG 9 · 11 · 12 · 13*Sustainable Cities · Circular Economy · Industrial Innovation · Climate*

Certificate No.	AiGLE-MSWBS-2026-001 (Mandate-Stage Indicative)
Asset Class	Municipal Solid Waste-Backed Securities (MSWBS) — Senior Tranche
Programme	Carbotura — National and International Roll-Out (US Phase 1: Top-10 Metros)
Sponsor	EPC Holdings on behalf of Carbotura HoldCo
Issuance Programme Size	\$1.5–2.0bn benchmark senior tranches; ~\$500bn cumulative US programme size at full TAM
Senior Tranche	Per benchmark: \$2bn senior, ~5% coupon, 10–15yr amortising matched to Offtake Agreement tenor
Capital Pool Corpus	\$2bn per tranche. Mandate per AiGLE Criteria Paper No. 3. Long-dated IG fixed-income core.
Construction-Loan Facility	Separate instrument. Originated from ABS Factory stacked lending book. Slotted under CRR III Article 122a/153(5). Indicative grade BBB at Pre-operational, A at Stabilisation.
Grade Date	May 2026
Grade Rationale	Exceptional Pillar IV input-side counterparty profile (Aaa-A municipal credits + statutory diversion mandates); structurally exceptional Pillar II via capital-pool wrap with construction-loan facility ringfencing construction-phase risk; strong Pillar I post-stabilisation cashflow projection with stacked output-stream diversification; moderately positive Pillar III (standard issuance opinions in DD). Senior tranche eligible for Basel III HQLA Level 1 classification and 0% standardised-approach risk weight under the federal-guaranteed issuer-class structure that the Carbotura mandate contemplates (per Part II §07 issuer-class taxonomy and §13 conditions). Other issuer-class structures (state-guaranteed, municipal-revenue, corporate) would produce different capital treatment; this grade is specific to the proposed federal-guaranteed structure.
Sharpe / Sortino (indicative)	0.25 / 0.42 (base, post-stabilisation) · 0.20 / 0.33 (AiGLE stress). Calibrated for institutional-grade fixed-income placement at modest spread to long-dated risk-free rate. Gilt-equivalent positioning consistent with HQLA Level 1 treatment.

Quantitative Growth Profile	V4 / D3 / E4 — Velocity 4/5 (continuous gate-fee and output-stream cycle); Duration 3/5 (facility lifetime 20–30 yrs across expansion cycles); Asset-Base Expansion 4/5 (waste-to-resource conversion recovers materials otherwise removed from the economic system; recovered materials re-enter manufacturing chains; municipal disposal costs avoided; state-level diversion mandates satisfied). Independent of credit grade; published per Part II §11.
ESG Pillar / SDG Cluster	Environmental — Circular Economy. Aligned to SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action — through avoided landfill methane). Mandate fit: circular-economy allocations, sustainable infrastructure mandates, municipal green-bond replacement strategies. Combined with AAA credit grade, V4/D3/E4 QG profile, and Basel III HQLA L1 / 0% RW positioning, the senior tranche satisfies the four-corner case for institutional capital deployment under §11.
Surveillance	Quarterly. Off-cycle triggers: corpus mandate breach; custodian credit event; municipal counterparty credit event; output-stream price dislocation; permit or regulatory change; structural breach of SPV documentation; construction-loan facility default; failure of any facility to commission within projected timeline.

INFORMATIONAL – NOT AN INVITATION TO INVEST

This grade is published as an analytical opinion on the structural and credit characteristics of the Carbotura senior MSWBS tranche under the AiGLE four-pillar methodology. It is not a recommendation to buy, sell, or hold any security or instrument and does not constitute investment advice, investment research, or a financial promotion. The grade is mandate-stage indicative — reflecting the Mandate Proposal information set as augmented by AiGLE's research — and is subject to confirmation following completion of the post-mandate due-diligence pack and offering documentation. The construction-loan facility is graded separately under specialised-lending slotting and is not part of this senior-tranche grade.

PART V

Pipeline and Path to Market

Authored by Efficiency Professor Consultancy

This Part sets out where the AiGLE-graded RWA ABS family stands at the date of this paper. The structural argument of Part I is supported by the methodology of Part II, the comparators of Part III, and the worked example of Part IV. What remains is the question of where the apparatus is now and how it scales. The short answer is that the LBS portfolio is operative; CBS and FBS sovereign mandates are in preparation; MSWBS is at mandate stage through Carbotura; and the stablecoin liquidity bridge is identified but not developed. The constraint is institutional adoption — and that is the question this paper addresses to its recipients.

§ 21 The Operative Portfolio — LBS

The AiGLE-graded LBS portfolio is the operating proof-of-concept for the wider Real-World Asset securitisation thesis. Five live AAA-graded certificates exist as at the date of this paper, each operating under AiGLE Criteria Paper No. 1 with senior-tranche structural enhancement, ATE-floored downside protection from Sunshine Property & Casualty Insurance Company Limited (Fitch IFS A-, Stable), and four-pillar grade derivation.

CERTIFICATE	GRADE	SHARPE	UNDERLYING
AiGLE-PPI-2025-001	AAA Prime	4.25	PPI Plevin Commission Claims. UK Supreme Court precedent (Plevin v Paragon [2014] UKSC 61). Major UK SIFI defendants. 98% historical success rate.
AiGLE-CFR-2025-001	AAA Prime	4.25	Car Finance Unfair Relationship. UK Supreme Court precedent (Johnson v FirstRand [2025] UKSC 33). Motor finance lenders + OEM captives. 98% screened success rate.
AiGLE-ECC-2025-001	AAA Prime	2.43	Energy Commission Claims. Court of Appeal precedent (Expert Tooling v Engie [2024] EWCA Civ 1314). Major UK energy suppliers. 85%+ success rate.
AiGLE-IRL-2025-001	AAA Prime	5.32	Irresponsible Lending. FOS regulatory route (CONC 5.2 + s.140A CCA). UK SIFI defendants. Replacement model. 95% effective success rate.
AiGLE-BLP-2025-001	AAA Prime	4.13	Blended Pool. 40% Irresponsible Lending + 30% Energy Claims + 30% PPI Plevin. Multi-genre diversified exposure. Weighted 6.4:1 OC.

LBS – OPERATIVE QG IN PRACTICE

The LBS portfolio is the operating demonstration that AiGLE-graded structured loan-note issuance produces AAA senior-tranche credit on Real-World cashflow at scale. The QG mechanism is wealth redistribution and monetary velocity — capital recovered from financial institutions returns to consumer balance sheets and re-enters the productive economy. Each certificate carries a V5/D1/E3 QG profile and aligns to the Social ESG pillar (SDG 8, 10, 16). The combined portfolio represents an operative AiGLE-graded asset class under Criteria Paper No. 1, available for institutional placement as at the date of this paper.

§ 22 In Preparation — CBS and FBS

Conservation-Backed and Forestry-Backed Securities are in preparation as at the date of this paper. AiGLE Criteria Paper No. 2 (the methodology set out in Part II of this paper) is operative; sovereign mandates are under negotiation in selected OECD jurisdictions; capital-pool corpus mandate frameworks under AiGLE Criteria Paper No. 3 (Part VI) are drafted and ready for issuer adoption. The structural form is established; the analytical authority is in place; the institutional capital deployment case is set out in Part II §13. What is required for first issuance is sovereign mandate confirmation and arranger appointment.

CBS / FBS – STATUS AND SCALE

Methodology: AiGLE Criteria Paper No. 2 (Part II of this paper) – operative.

Corpus standard: AiGLE Criteria Paper No. 3 (Part VI of this paper) – operative.

Sovereign mandates: Under negotiation in selected OECD jurisdictions.

First issuance: Subject to sovereign mandate confirmation and arranger appointment.

Benchmark size: \$1-2bn per issuance.

First three years: Targeted toward \$50-100bn aggregate across multiple sovereigns.

Decade aggregate: Trillion-scale across the OECD natural-capital base. Every OECD sovereign with significant national forest, conservation programme, or biodiversity commitment is a potential CBS / FBS issuer at \$1-2bn benchmark per

programme, with multiple programmes per sovereign over the issuance pipeline.

Combined with the sovereign wealth fund formation that occurs at every

issuance through the capital-pool corpus, this is structurally the largest

sovereign-finance opportunity since the post-war period.

The wealth-management dimension

There is a structural dimension to CBS and FBS that needs to be set out explicitly because it is the largest single component of the institutional opportunity. The capital that flows into the senior tranches of CBS and FBS is overwhelmingly sovereign-managed, and overwhelmingly structurally permanent. Sovereign wealth funds, central-bank reserve assets, sovereign endowments, and matched-tenor pension and insurance liabilities together account for the structurally-stable capital base that CBS and FBS senior tranches are designed to occupy. This is not adjacent to the asset class; it is the asset class's primary investor universe.

Aggregate global sovereign wealth fund AUM is approximately \$13 trillion as at 2025, with a meaningful and rapidly-growing component mandated to ESG, climate, biodiversity, or natural-capital allocations. Norway's Government Pension Fund Global is over \$1.7 trillion. Saudi Arabia's PIF over \$900bn. UAE combined sovereign wealth funds over \$1.5 trillion. Singapore GIC and Temasek combined over \$1 trillion. China SAFE and CIC combined approaching \$4 trillion. Kuwait, Qatar, Abu Dhabi together over \$1 trillion. Each of these is a natural CBS / FBS senior-tranche holder under existing mandate, and several have explicit allocations to nature-positive or climate-aligned holdings that CBS and FBS satisfy by construction.

On the issuer side, every CBS or FBS issuance creates a capital-pool corpus that is itself sovereign-wealth-fund-formation. The corpus sits in HQLA-eligible instruments under the published Mandate (AiGLE Criteria Paper No. 3); operations are funded annually from corpus returns; the corpus itself is preserved through the senior-tranche tenor and rolled into refinancing or sovereign endowment continuation at maturity. For sovereigns with existing sovereign wealth fund infrastructure, the CBS / FBS corpus integrates into the existing managed asset book; for sovereigns without, the corpus is itself the formation of one. Either way, the wealth-management economics are structurally permanent. 80%+ of the capital deployed remains under sovereign management indefinitely.

WEALTH MANAGEMENT IS THE LARGEST COMPONENT

Per-issuance flows:

Senior-tranche placement	\$1-2bn	(one-time at issuance; held to maturity by institutional buyers)
Capital-pool corpus	\$1-2bn	(managed indefinitely; recurring asset-management fee)
Operating draw	~5%	of corpus per annum (funds programme; corpus preserved)

Decade aggregate at trillion-scale issuance:

Aggregate corpus under management:	\$500bn to \$1tn+	depending on issuance pace
Asset-management fee at 25-50bp:	\$1.25bn to \$5bn	annual recurring
Compounding across pipeline:	corpus pool grows	as issuance pipeline expands

This is structurally larger than the bookrunner economics. The senior-tranche placement is a one-time fee event at issuance; the corpus is a permanent managed asset book. For institutional banks that combine bookrunner mandate with corpus management mandate, the wealth-management revenue stream materially exceeds the issuance-fee revenue stream over the life of any sovereign-scale CBS or FBS programme.

This is also why the CBS / FBS conversation with sovereigns is structurally different from the conventional sovereign-bond conversation. The sovereign is not borrowing; the sovereign is constructing a managed asset book that funds national natural-capital programmes perpetually. The financing tool delivers capital deployment without further currency dilution and without further sovereign balance-sheet expansion. The wealth-management economics accrue to the institutional asset manager appointed under the Corpus Mandate. The two are complementary; a single bank with both bookrunner and asset-management capability captures both.

§ 23 MSWBS — Carbotura Mandate

MSWBS is demonstrated through the Carbotura programme — an industrial circular-economy implementation that uses AiGLE-graded MSWBS senior tranches to fund national and international roll-out of municipal solid waste-to-resource processing facilities. The Carbotura senior MSWBS tranche grades AAA — Prime · Stable Outlook · Basel III HQLA L1 · 0% RW (qualifying) under the four-pillar methodology, with V4/D3/E4 QG profile and Environmental ESG pillar (SDG 9, 11, 12, 13) per the certificate set out in Part IV §20.

Carbotura is at mandate stage as at the date of this paper. Mandate Proposal delivered to JPMorgan Chase under Mutual Confidentiality Undertaking, April 2026. The structural innovation — capital pool secures construction-loan facility originated from the ABS Factory's stacked lending book; senior MSWBS tranche serviced by post-stabilisation gate-fee and output-stream cashflow — preserves the gilt-equivalent senior-tranche treatment under the specific federal-guaranteed structure that the Carbotura mandate contemplates (see §07 issuer-class taxonomy), while ringfencing construction-phase risk into a separately graded instrument. Three structurally distinct credit instruments per issuance. Programme scale at full TAM: approximately 5,000 US facilities, \$500bn cumulative MSWBS issuance. Other Carbotura-platform issuances or other MSWBS platforms may use any of the four issuer classes — federal-guaranteed, state-guaranteed, municipal-revenue, or corporate — depending on the specific programme structure.

CARBOTURA — STRUCTURAL POSITIONING

Carbotura is the worked example that demonstrates the MSWBS architecture is operative. The programme has the same long-duration commercial throughput as forestry — multi-decade municipal Offtake Agreements anchored by statutory diversion mandates, stacked output-stream revenue across recovered raw materials, and continuous facility operation across the senior-tranche tenor. The QG profile (V4/D3/E4) sits at intermediate position between LBS (high velocity, low duration) and CBS/FBS (low velocity, high duration). Combined with the AAA credit grade, ESG/SDG mapping, and Basel III L1 HQLA / 0% RW positioning, Carbotura satisfies the four-corner institutional case for \$1.5–2bn benchmark senior tranche placement.

§ 24 Stablecoin Bridge — The Liquidity Connection

The fifth element in the pipeline is not yet developed but is identified clearly enough to record here. AiGLE-graded RWA ABS senior tranches are institutional-grade fixed-income instruments. They are not, in their native form, retail-liquid. The connection between AiGLE-graded RWA ABS and retail-rail liquidity is the question of stablecoin reserve composition — and the structural opportunity is significant.

Approximately \$200bn of stablecoin reserves currently sit in short-dated US Treasuries — the principal stablecoin issuers (Tether, Circle) are among the larger non-sovereign holders of short-dated Treasury bills. Each unit of stablecoin issued, by reserve construction, funds US sovereign debt issuance. This is structurally the inverse of Quantitative Growth: capital deposited into stablecoin reserves currently funds sovereign general expenditure rather than productive Real-World Asset deployment. The reserves expand the central-bank-supported asset universe rather than the productive base.

AiGLE-graded RWA ABS senior tranches — particularly CBS, FBS, and MSWBS, with Basel III HQLA L1 / 0% RW positioning under §13 — are eligible reserve assets under the same regulatory framework that supports Treasury holdings. A stablecoin issuer holding RWA ABS senior tranches in reserve composition would, by reserve construction, fund Real-World Asset deployment rather than sovereign deficit financing. The structural implications are large enough to warrant separate treatment, but the connection is recorded here as the natural retail-liquidity bridge for the AiGLE-graded family.

STABLECOIN POTENTIAL – THE BRIDGE TO LIQUIDITY

RWA ABS deliver senior-tranche credit quality. Stablecoins deliver retail-rail liquidity. The two are structurally complementary: a sovereign-guaranteed or sovereign-equivalent-guaranteed senior tranche (CBS and FBS by construction; federal-guaranteed MSWBS per §07) is exactly the reserve composition a properly-disclosed stablecoin issuer should hold.

The combination would connect inert ABS positions to high-velocity payment liquidity, would shift stablecoin reserve demand from sovereign debt to Real-World Asset deployment, and would strengthen reserve transparency through the published Corpus Mandate disclosures under AiGLE Criteria Paper No. 3.

The full economic case – credit market implications, regulatory framework, reserve disclosure standards, and the political consequences of redirecting stablecoin demand away from sovereign debt – sits outside the scope of this paper. EPC records the structural opportunity here and is willing to develop the full treatment as a separate paper if there is institutional interest.

§ 25 Institutional Adoption Case

The structural argument set out in this paper is, in EPC's view, complete. Part I diagnoses the credit-on-existing-assets growth model that has dominated financial markets since the 1970s and sets out why it is structurally exhausted. Part II presents the AiGLE four-asset-class family — LBS, CBS, FBS, MSWBS — as the operative response, supported by the four-pillar grading methodology, the capital-pool structural innovation, the QG and ESG/SDG profile dimensions, and the Basel III HQLA L1 / 0% RW capital treatment. Part III demonstrates through the comparator analysis that the alternatives — DFN swaps, sovereign green bonds, SLBs, project bonds, REITs, TIMOs, conventional litigation funding structures — do not deliver the same structural answer. Part IV demonstrates through the Carbotura worked example that the framework is operative rather than theoretical. Part VI publishes the Corpus Management Standard that governs the structural innovation.

What remains is institutional adoption. EPC's argument is that the apparatus is in place; what is required is the institutional decision to deploy at scale. The decision has four components.

- **Mandate.** Bookrunner / structuring mandate on the issuance pipeline. The first sovereign CBS or FBS issuance, the first MSWBS through Carbotura, the next LBS placement in the operating portfolio. Each mandate establishes the bookrunner relationship, generates fee income, and creates a reference transaction for the wider asset class.
- **Capital.** Anchor balance-sheet allocation against the senior tranches. Bank treasury allocations against gilt-equivalent CBS and FBS senior tranches and federal-guaranteed MSWBS where available; municipal bond fund and IG fixed-income allocations against state-guaranteed and municipal-revenue MSWBS; corporate treasury and IG fixed-income allocations against corporate-issued MSWBS; alternative-credit allocations against LBS senior tranches; eventual stablecoin reserve allocations against the sovereign-guaranteed sub-set as the liquidity bridge develops. Anchor allocations seed institutional deployment and demonstrate the asset class to the wider capital base.
- **Origination.** Construction-loan facility origination for MSWBS programmes, slotted under CRR III Article 122a/153(5). NIM income to the originator over the construction-phase tenor; collateralised by the capital pool corpus and the under-construction facility; independently underwritten and graded. The construction-loan book is a parallel revenue stream to the senior MSWBS bookrunner economics.
- **Distribution.** Secondary-market making in the senior tranches. Programmatic issuance pipelines (LBS by claim genre, CBS and FBS by sovereign and programme, MSWBS by metropolitan roll-out) require secondary-market depth to support institutional placement. Bookrunner banks that establish secondary-market positions early establish the franchise for the asset class.

Regional franchise economics

The institutional adoption case becomes most concrete when applied to specific regional markets where the natural-capital base, municipal infrastructure pipeline, and consumer-litigation universe align with sovereign appetite for capital-markets-grade financing tools. EPC has been in early discussion with members of ASEAN on the application of the framework to regional natural-capital and circular-economy programmes — but the regional case generalises. Latin America carries equivalent natural-capital base and equivalent need for risk-managed senior financing solutions; Africa carries equivalent need across both natural-capital and infrastructure dimensions. The structural argument is universal: the AiGLE-graded RWA ABS framework delivers a senior financing solution that works simultaneously for financiers, credit markets, sovereigns, farmers, and society. No comparator instrument delivers all five.

ASEAN as illustrative case

ASEAN is approximately 670 million people, \$4 trillion combined GDP, and structurally massive natural-capital base. Indonesia holds the world's third-largest tropical forest area. The Philippines,

Vietnam, Thailand, Malaysia, and Cambodia carry significant tropical hardwood, mangrove blue carbon, and biodiversity programmes. The region's municipal solid waste generation is among the fastest-growing globally, with severe diversion-mandate pressure across Manila, Jakarta, Bangkok, Ho Chi Minh City, Kuala Lumpur, and Singapore. Existing regional sovereign wealth fund infrastructure — Indonesia Investment Authority \$7.5bn, Khazanah Malaysia \$40bn, Vietnam SCIC \$5bn, Thailand Vayupak \$13bn, Singapore GIC and Temasek separately — is sub-scale relative to the natural-capital opportunity at sovereign-by-sovereign level (Singapore excepted), and is structurally complementary to the capital-pool sovereign-wealth-fund formation that occurs at every CBS / FBS issuance.

For a bank that establishes the bookrunner franchise across the ASEAN sovereign capital-pool ABS family, the institutional consequences are concrete. Bookrunner mandates across multiple sovereign issuers, recurring annually. Sovereign wealth fund management mandates on the capital-pool corpus generated by each issuance — at trillion-scale issuance pace this becomes an asset-management business of \$50–100bn AUM scale within five years. Construction-loan origination for MSWBS programmes across regional metropolises, each carrying \$1–2bn programme size. Secondary-market making in the resulting senior tranches with central-bank repo eligibility under domestic and reserve-currency frameworks. Sovereign banking relationships established through the ABS Factory infrastructure that typically take decades to build through traditional sovereign lending books. Reserve-currency clearing positions on issuance proceeds and corpus management. ESG/SDG mandate alignment that opens institutional capital flows from European pension and Middle Eastern sovereign mandates.

Latin America and Africa carry the same case

The argument is structurally identical for Latin America and for Africa. Latin America carries the world's largest tropical forest base across Brazil, Colombia, Peru, Ecuador, Venezuela, Bolivia, the Guianas, and the Central American belt; aggregate sovereign wealth fund infrastructure is sub-scale relative to the natural-capital opportunity (Chile \$20bn, Mexico \$7bn, Brazil currently no sovereign wealth fund); the region carries equivalent municipal solid waste pressure across the major metropolitan economies; consumer-credit and bank-conduct litigation universes are present and growing. Africa carries equivalent natural-capital base across the Congo Basin, the Sahel, the East African coastal mangrove belt, and the Southern African biodiversity hotspots; sovereign wealth fund infrastructure is concentrated in oil-economy sovereigns (Nigeria \$3bn, Angola \$5bn, Botswana \$5bn) and is structurally available to expand through CBS / FBS corpus formation; municipal infrastructure financing requirements are large and currently dependent on multilateral and bilateral lending.

THE REGIONAL FRANCHISE OPPORTUNITY

What the framework offers, in plain terms:

For financiers asset management + structurally distinct across the issuance regional sovereigns.	Bookrunner + construction-loan origination + corpus secondary-market and clearing flows. Four revenue streams per issuance. Compounding regional franchise pipeline. Standing institutional position with
For credit markets sovereign-guaranteed Repo-eligible at central aggregate issuance over asset class with and capital treatment.	Basel III HQLA L1 / 0% RW senior tranches under structures (CBS, FBS, federal-guaranteed MSWBS). banks for the qualifying classes. Trillion-scale a decade across the family. Genuine new institutional proper grading discipline, calibrated to issuer class
For governments Sovereign retains base. Capital-pool issuance. National corpus returns.	Capital deployment without further currency dilution. title to the underlying natural or industrial asset corpus is sovereign-wealth-fund-formation at every natural-capital programmes funded perpetually from
For farmers and circular-economy programmes end beneficiaries payments. Legitimate tax base.	Sovereign-funded conservation, forestry, and operating at scale. Direct ecosystem-services carbon and biodiversity revenue. Local employment and
For society stack reduction	Asset-base expansion rather than re-pricing. Credit-

through QG instead of further QE. Wealth restoration through LBS at consumer-economy multiplier. Real institutional response to the structural exhaustion documented in Part I.

No comparator financing instrument delivers all five simultaneously. Project finance addresses the financier and the project. Sovereign bonds address the financier and the government. DFN swaps address the financier, the government, and society. Sovereign green bonds add ESG-mandated capital to the same. Only the capital-pool RWA ABS form addresses all five – financier, credit market, sovereign, beneficiary, and society – through a single instrument family. This is what EPC's structural argument is, in operational terms.

THE EPC POSITION

The structural problem set out in Part I is now visible on every major balance sheet – bank, central-bank, sovereign, household. The credit-on-existing-assets model has reached its arithmetic limit, and the failure modes documented in §03 are working through the system in real time. The inversion is available: the same securitisation infrastructure that delivers QE-equivalent dilution under MBS turns, with no change to the financial machinery, into the delivery vehicle for accretive QG asset-base expansion under capital-pool-funded RWA ABS. Same machinery. Inverse economics. The transition does not require new financial-engineering capability. It requires deployment.

The scale opportunity is asymmetric across the four asset classes. The sovereign capital-pool family – CBS and FBS by construction, plus federal-guaranteed MSWBS – is trillion-scale across the OECD over a decade. MSWBS at full TAM in the US alone scales toward approximately \$500bn cumulative issuance across the four issuer classes (federal, state, municipal-revenue, corporate); sovereign CBS and FBS scale across the OECD natural-capital base at a multiple of that. Combined sovereign wealth fund formation through the capital-pool corpus accrues at every CBS or FBS issuance. This is the financing tool for governments who need capital deployment without further currency dilution and without further sovereign balance-sheet expansion –

and is the door-opener for the conversation with national treasuries, sovereign wealth funds, and central-bank reserve managers. State, municipal-revenue, and corporate MSWBS open additional placement universes – municipal bond funds, IG fixed-income, and corporate treasury – that scale the asset-class adoption beyond purely sovereign capital. LBS is billion-scale rather than trillion-scale, but with disproportionately large economic-stimulus effect through high-velocity consumer redistribution; the LBS portfolio is operative now and is the demonstration that the AiGLE-graded structured loan-note machinery delivers AAA on real cashflow.

EPC's argument to institutional readers of this paper is straightforward. The first banks to take bookrunner mandate, to allocate balance-sheet capital, to originate construction-loan facilities, and to make secondary markets in the AiGLE-graded RWA ABS family will establish the franchise for the asset class. The franchise is structurally large – trillions across the sovereign family over a decade, with operative billions-scale demonstration through the LBS portfolio today. The paper is generic by construction because the opportunity is generic. The cover identifies the recipient. The opportunity does not.

PART VI

Criteria Paper No. 3

The AiGLE Corpus Management Standard

§ 26 Purpose & Scope

This Criteria Paper sets out AiGLE's published standard for the management of capital pool corpus held in support of capital-pool-funded asset-backed securities — RWA NABS, CBS, FBS, and MSWBS — graded under the AiGLE framework. The Standard is binding on issuers seeking AiGLE grades on senior tranches in this asset class family. Failure to satisfy the Standard at issuance precludes the senior tranche from achieving the AAA grade band, and material deviation from the Standard during the life of the instrument is a Pillar II surveillance trigger that may result in grade migration.

Why a published Standard

The capital-pool form is the structural innovation that distinguishes AiGLE-graded sovereign and sovereign-equivalent ABS from comparator instruments. The corpus is not an ancillary feature — it is the structural foundation that funds the underlying programme, services the senior tranche through structural enhancement, and supports the Basel III HQLA Level 1 / 0% RW capital treatment. A capital pool that is poorly managed, opaquely disclosed, or invested in inappropriate instruments fails the structural premise of the asset class. AiGLE's grade applies to senior tranches whose corpus management satisfies a published, surveyable, enforceable standard.

Application

The Standard applies at three points in the life of an AiGLE-graded instrument. At issuance, the issuer must publish a Corpus Mandate that satisfies the requirements of §25 below; AiGLE verifies compliance as a condition of grading. During the life of the instrument, AiGLE surveys the corpus quarterly through the disclosure regime in §26 and applies the deviation triggers in §27. At material events — corpus mandate breach, custodian credit event, NAV deviation beyond defined thresholds — AiGLE conducts off-cycle review and may migrate the grade.

THE STANDARD AS PILLAR II INPUT

Compliance with the Corpus Management Standard is a Pillar II input under the four-pillar methodology, contributing 40% of Pillar II weight for MSWBS and 25% of Pillar II weight for CBS and FBS. A non-compliant Corpus Mandate is grading-dispositive: senior tranches over non-compliant pools cannot achieve AAA, regardless of other Pillar II strength.

§ 27 Custodian Standards

The corpus must be held by a custodian satisfying the requirements set out below. The custodian is the institutional party with operational responsibility for the corpus, distinct from the asset manager

(which executes the Corpus Mandate) and from the issuer SPV (which holds beneficial title to the corpus on trust for senior-tranche holders).

Custodian eligibility

REQUIREMENT	STANDARD
Regulatory status	Custodian must be a bank or securities depository regulated in an OECD jurisdiction. Acceptable regulators include US Federal Reserve, OCC, FDIC; UK PRA / FCA; EU ECB / NCAs under SSM; equivalent regulators in Australia, Canada, Japan, Switzerland, Singapore, and other major OECD jurisdictions.
Credit standing	Long-term issuer credit rating of A-/A3 or higher from at least two of S&P, Moody's, Fitch. Custodian credit downgrade below A-/A3 is a Pillar IV surveillance trigger.
Account segregation	Corpus held in segregated client accounts under applicable client-asset rules (US: SEC 15c3-3; UK: FCA CASS; EU: MiFID II safeguarding rules). Corpus assets must not form part of the custodian's general balance sheet and must be ringfenced from custodian insolvency.
Operational capacity	Custodian must have demonstrated capacity to provide global custody across the eligible-instrument universe defined in §25, daily NAV calculation, monthly reporting, and quarterly attribution analysis. Minimum AUM in custody \$100bn.
Independence	Custodian must be independent of issuer, sponsor, programme manager, and arranger. Common ownership, board interlocks, and material commercial relationships beyond standard custody fees are disclosed at issuance and assessed for independence.
Trustee oversight	Independent trustee appointed for senior-tranche holders, with rights to inspect corpus accounts, receive custodian reports, and act on corpus mandate breach. Trustee is itself a regulated IG financial institution.

§ 28 Permitted Investment Mandates

The Corpus Mandate is set per-issuance and disclosed in the offering documentation. Three mandate categories are recognised under this Standard. Issuers may select one mandate category per issuance; mixed mandates require AiGLE pre-approval as a non-standard variation.

Mandate Category A — Conservative

Permitted instruments: OECD-qualifying sovereign government securities (Tier 1 and Tier 2 sovereigns per AiGLE sovereign tier classification); supranational AAA-rated debt securities (World Bank, EIB, ADB, IADB); investment-grade corporate debt (minimum A-/A3 from at least two CRAs); IG covered bonds; investment-grade asset-backed securities (excluding own-issuance retained risk-retention paper). Maximum tenor matched to senior-tranche tenor. Currency restricted to the senior-tranche currency or fully hedged.

Concentration limits — single-issuer maximum 10% (excluding sovereigns of Tier 1 and Tier 2 status, which carry no single-issuer cap); single-sector maximum 25%; non-OECD exposure prohibited; equities and equity-linked instruments prohibited; alternative assets (private credit, real estate, infrastructure equity) prohibited; derivatives permitted only for hedging, not for return enhancement.

Expected return profile: matched-tenor risk-free rate plus 30–80 basis points. Volatility: 50–150 basis points annualised. Conservative Mandate is the appropriate selection where the senior tranche is positioned as an institutional fixed-income holding without expected corpus return enhancement, and where the issuer prioritises corpus preservation and credit-quality over yield.

Mandate Category B — Balanced

Permitted instruments: all Conservative Mandate instruments, plus structured fixed-income (CLO senior tranches AAA/AA only; investment-grade securitisation senior tranches); inflation-linked sovereign and supranational debt; investment-grade emerging-market sovereign debt under defined country list; bank capital instruments (AT1 prohibited; Tier 2 capped at 5%); limited equity allocation up to 10% in OECD large-cap public equity index funds.

Concentration limits — single-issuer maximum 7.5% (sovereigns Tier 1 / Tier 2 uncapped); single-sector maximum 30%; structured-credit allocation maximum 25%; equity allocation maximum 10%; emerging-market sovereign maximum 15%; derivatives permitted for hedging and limited tactical positioning under defined risk budget.

Expected return profile: matched-tenor risk-free rate plus 100–200 basis points. Volatility: 200–400 basis points annualised. Balanced Mandate is the appropriate selection where the issuer seeks corpus return enhancement to reduce the senior coupon required to cover programme operations, accepting modestly higher volatility on the corpus.

Mandate Category C — SWF-Mandated

The corpus is mandated to a sovereign wealth fund manager — either an existing sovereign wealth fund of the issuing sovereign, or a regulated institutional asset manager appointed under a defined mandate document. The mandate document must satisfy the disclosure requirements in §26 below and must specify: investment universe, concentration limits, performance benchmark, risk budget, fee structure, governance, and AiGLE surveillance access rights.

Permitted instruments under SWF Mandate: as set by the mandate document, subject to the constraint that no single position exceeds 5% of corpus and that aggregate equity-and-alternatives allocation does not exceed 30% without AiGLE pre-approval. SWF-Mandated corpora are subject to enhanced quarterly reporting under §26.

Expected return profile: as set by the mandate document and benchmark. Volatility: subject to defined risk budget. SWF Mandate is the appropriate selection where the issuer is building a national sovereign wealth fund through the RWA NABS issuance programme and wishes to integrate the corpus into a broader sovereign asset management framework.

MANDATE SELECTION – AIGLE GUIDANCE

Conservative – most appropriate for first-issuance, pilot-programme, or shorter-tenor (≤ 15 yr) issuances where corpus preservation and credit-quality are paramount.

Balanced – most appropriate for medium-tenor (15–40yr) issuances where modest corpus return enhancement is sought to ease senior coupon coverage requirements.

SWF-Mandated – most appropriate for long-tenor (40yr+) issuances and for sovereigns developing or expanding sovereign wealth fund infrastructure. Suited to CBS perpetual structures and FBS over long-rotation hardwood. Provides the strongest sovereign-wealth-fund formation thesis.

§ 29 Reporting & Disclosure

Corpus disclosure is the structural counterpart of programme MRV. Programme cashflows and corpus management together support the senior-tranche credit profile; both must be observable, auditable, and surveyable by AiGLE and senior-tranche holders. The reporting requirements are set out below.

Issuance disclosure

At issuance, the offering documentation must include: the Corpus Mandate document in full; identity and credit profile of the custodian; identity and credit profile of the asset manager (where distinct from custodian); identity of the trustee; mandate-category election (A, B, or C per §25); concentration limits and risk-budget parameters; expected return profile and volatility band; performance benchmark; fee structure; governance arrangements including AiGLE access rights.

Ongoing disclosure

DISCLOSURE	FREQUENCY	CONTENTS
NAV statement	Monthly	Net asset value of corpus at month-end. Comparison to issuance NAV and to mandate-category benchmark. Exceptions and material movements flagged.
Holdings statement	Quarterly	Full position-level holdings disclosure to AiGLE and trustee. Aggregated sector and credit-quality disclosure to senior-tranche holders in offering-prospectus level of detail.
Performance attribution	Quarterly	Attribution of corpus performance to allocation, security selection, currency, and timing effects. Comparison to mandate-category benchmark.
Compliance statement	Quarterly	Statement by asset manager and trustee confirming compliance with mandate constraints — concentration limits, eligible instruments, risk budget. Exceptions and remediation timelines disclosed.
Annual audit	Annual	Independent audit by Big Four or equivalent regulated audit firm covering corpus existence, valuation, mandate compliance, fee structure, and custody arrangements.
Material event notice	Within 5 BD	Notice to AiGLE, trustee, and senior-tranche holders of any: mandate breach; custodian credit event; asset manager change; material redemption or liquidity event; NAV decline beyond defined threshold (typically 10% from prior quarter).

§ 30 Surveillance & Deviation Triggers

AiGLE maintains quarterly surveillance over corpus management for every AiGLE-graded RWA NABS, CBS, FBS, and MSWBS. Surveillance is conducted against the disclosure regime in §26 and the deviation triggers below. A trigger event causes off-cycle review of the senior-tranche grade; the review may produce no change, a Watch placement, or a grade migration.

Pillar II — Structural triggers

- **Mandate breach.** Concentration limit breach, eligible-instrument violation, currency-mismatch breach, leverage breach, derivatives misuse. Treated by reference to magnitude and remediation: minor breaches with prompt remediation are noted; persistent or material breaches trigger Watch placement.

- **Custodian credit event.** Custodian credit downgrade below A-/A3, regulator action, operational failure (segregation breach, settlement failure, reporting failure). Triggers Watch with 30-day remediation window for custodian replacement or AiGLE-approved transitional arrangement.
- **Asset manager change.** Material change in the asset manager — succession, transfer, regulatory action, key-person event. Triggers off-cycle review with focus on continuity of mandate execution.
- **NAV deviation.** NAV decline of 10% or more from prior quarter (Conservative Mandate); 15% or more (Balanced Mandate); 20% or more (SWF-Mandated). Triggers off-cycle review and exception-statement requirement from asset manager.
- **Trustee event.** Trustee resignation, replacement, regulatory action, or material conflict-of-interest disclosure. Triggers governance-quality review.

Pillar III — Legal & Operational triggers

- **Legal opinion withdrawal.** Withdrawal or material qualification of any counsel-issued opinion supporting the mandate (jurisdiction, custody, segregation, trustee duties).
- **Regulatory action.** Regulator action against custodian, asset manager, or trustee that affects their ability to perform mandate duties.
- **Litigation against the corpus.** Material litigation affecting corpus title, segregation, or beneficial-ownership structure.

Pillar IV — Counterparty triggers

- **Concentration breach by drift.** Concentration limit breach arising from market movement rather than active position-taking. Subject to defined remediation window (typically 90 days) before treated as active breach.
- **Counterparty default.** Default by any holding in the corpus. Treated by reference to magnitude relative to corpus and to recovery prospects.
- **Custodian or trustee replacement.** Where custodian or trustee is replaced, the replacement must satisfy §24 standards and is itself a Pillar IV input subject to AiGLE approval as condition of continuation of grade.

WHAT SURVEILLANCE ACHIEVES

The Standard converts the capital pool from a structural feature into a surveyable input. Issuers cannot achieve AAA on a non-compliant pool; cannot maintain AAA on a pool that drifts out of compliance; and cannot conceal corpus management from AiGLE or from senior-tranche holders. The Standard is what makes the capital-pool form gradable rather than merely structural.

§ 31 Definitions & Notices

Defined terms

- **ABS Factory.** The platform architecture combining long-duration cashflow, investment-grade counterparty, capital pool, securitised SPV issuance, bookrunner programme, and commodities-trade book, applied across the four asset classes (LBS, CBS, FBS, MSWBS).
- **Article 6 (Paris Agreement).** The provisions of the Paris Agreement establishing cooperative approaches (Art. 6.2) and the centralised mitigation mechanism (Art. 6.4) for international transfer of greenhouse gas mitigation outcomes (ITMOs).
- **ATE (After the Event) Insurance.** Insurance policy covering disbursements and adverse costs in the event of an unsuccessful claim. In LBS structures, ATE insurance is the primary downside risk mitigation tool.
- **Capital Pool / Corpus.** The pool of capital-markets instruments held by the SPV and managed under the Corpus Mandate per Criteria Paper No. 3. Funds programme operations from corpus return; provides structural enhancement to senior tranche.
- **CBS — Conservation-Backed Security.** Sovereign-issued capital-pool-funded ABS over a perpetual conservation programme. Performance-leaning. Senior tranche serviced by stacked annual ecosystem-services revenue.
- **Continuous Cover Forestry (CCF).** Silvicultural system maintaining continuous forest cover through selective harvesting. Generates more even cashflow than rotation forestry.
- **Corpus Mandate.** The published investment mandate governing the capital pool corpus. Set per-issuance under Criteria Paper No. 3 categories A (Conservative), B (Balanced), or C (SWF-Mandated).
- **FBS — Forestry-Backed Security.** Sovereign-issued capital-pool-funded ABS over a forestry rotation programme. Return-leaning. Senior tranche serviced by stacked annual revenue plus terminal timber clearfell.
- **FPIC.** Free, Prior and Informed Consent — UNDRIP principle that affected indigenous and local communities are consulted and consent obtained before activities affecting their territories or rights.
- **Government-Note-Wrapped ABS.** ABS in which the senior tranche is issued by, or unconditionally and irrevocably guaranteed by, an OECD-qualifying sovereign, structured to attract sovereign-equivalent capital treatment under Basel III.
- **HQLA.** High-Quality Liquid Assets — assets qualifying under Basel III LCR framework as liquid assets for stress-period funding requirements. Level 1 includes sovereign exposures meeting specific liquidity, transferability, and rating criteria.
- **ICVCM Core Carbon Principles.** High-integrity threshold criteria for carbon credits issued by the Integrity Council for the Voluntary Carbon Market.

- **ITMO.** Internationally Transferred Mitigation Outcome — a mitigation outcome generated and authorised by a host country under Article 6 of the Paris Agreement.
- **MSWBS — Municipal Solid Waste-Backed Security.** Capital-pool-funded ABS in which the corpus secures construction-loan facilities funding waste-processing facilities. Senior tranche serviced by post-stabilisation gate fees and output-stream revenue.
- **Quantitative Growth.** Deployment of capital into Real-World Assets that build economic value through processing, financing, and trading. Contrasted with Quantitative Easing, which expands monetary aggregates against existing assets.
- **Risk-Retention.** Requirement under 17 CFR Part 246 (US) and equivalent EU rules that securitisation sponsors retain a 5% economic interest in their issuances. Retained own-issuance paper is excluded from HQLA at any level under LCR rules.
- **RWA NABS — Real-World Asset Natural-Asset-Backed Security.** Umbrella class for sovereign-issued capital-pool-funded ABS over national natural-capital programmes. Includes CBS and FBS sub-classes.
- **Stacked Revenue.** Combination of multiple revenue streams from a single underlying asset — for natural-capital ABS, typically timber/carbon/biodiversity/water/ecosystem services; for MSWBS, gate fees plus multiple recovered raw-material output streams.
- **Sovereign Wealth Fund Mandate (SWF Mandate).** Corpus Mandate Category C — corpus mandated to a sovereign wealth fund manager under a defined mandate document. Suited to long-tenor issuances and to sovereigns developing or expanding sovereign-wealth-fund infrastructure.

Notices

This Criteria Paper is published by AiGLE, a trading division of Trance Limited (Turks and Caicos Islands ordinary entity OE025742). It establishes the operative criteria for the management of capital pool corpus held in support of capital-pool-funded asset-backed securities graded under the AiGLE framework. Compliance with the Standard is a condition of senior-tranche grading at the AAA band; material deviation is a Pillar II surveillance trigger.

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End of EPC White Paper – The Quantitative Growth Thesis