NeuRepublic

ENERGY. INTELLIGENCE. SHARED PROSPERITY.

The Global Dividend Engine

Universal Basic Rights and the future of human work

Larry Croski | Chief Humanity

Complete thesis and execution book • Version 2.03

Concept record: September 25, 2014 | Modified: October 26, 2026



NeuRepublic

The Global Dividend Engine

Energy. Intelligence. Shared prosperity.

Malaysia → Indonesia → Thailand

01 | INVEST IN ENERGY

Malaysia financial reference

Generation • Storage • Grid • Efficiency

US$5bn + US$10bn + US$10bn

US$25bn total

Overlapping five-year phases





02 | ENABLE INTELLIGENCE

AI agents • Robotics • Humanoid automation

Higher-value human work

12%	6%	30 years
Project IRR target	Capital-cost benchmark	Operating reference

03 | SHARE THE BENEFITS

Equilibrium Engine

Community SPV: **98%** of pre-option residual economic rights

Essentials • Learning • Opportunity • Reinvestment



YEARS 21–30: CAPITAL OPTION

After full original capital repayment, 100% of original principal is paid as new capital for 30% of prospective phase economic rights.

Post-exercise: Community 68.6% • Capital 30% • Steward 1.4%

Universal Basic Rights

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Publication record

The Global Dividend Engine
Universal Basic Rights and the future of human work

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The financial schedules are management targets and a normalized analytical model. They are not audited operating results, secured funding, awarded concessions or an offer of securities. Executed project documents determine binding obligations. Figures are nominal US dollars unless another currency is stated.

Regional sequence: **Malaysia → Indonesia → Thailand**. The financial example covers Malaysia only.

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01 The dividend of civilisation

Humanity has spent generations turning knowledge into productive power. Energy extends physical effort. Computing extends analysis. Robotics places intelligence into the material world. The central question of this century is who participates in the value these systems produce. NeuRepublic answers through ownership: establish the community's economic interest when the enterprise is formed, and preserve that interest as technology advances.

My starting point is human freedom. A society succeeds when people can meet essential needs, develop their abilities, care for others and pursue discovery. Work remains important, but survival need not depend indefinitely on performing tasks that machines can do more safely and effectively. The objective is to release human capacity for more valuable work and a fuller life.

NeuRepublic connects that objective to assets with customers and measurable cash flow. Energy concessions form the first productive foundation. The Equilibrium Engine records the relationship between capital providers, operating businesses and communities. Universal Basic Rights describes the destination: reliable access to essentials and meaningful opportunity, supported by productive wealth.

Malaysia is the first implementation market and the sole numerical example in this edition. Indonesia follows, then Thailand. The sequence preserves a common institutional design while respecting each country's laws, energy markets and community arrangements. The global ambition begins with a specific national execution discipline.



Human time, family connection and discovery are the programme’s purpose.

02 Biological and digital intelligence

Biological intelligence carries lived experience, relationships, vulnerability and moral responsibility. Digital intelligence expands the speed and scale of analysis and execution. NeuRepublic places these capabilities in a productive partnership: people determine legitimate purposes and institutions; machines help deliver outcomes within those boundaries.

The universe provides the philosophical setting. Humanity is part of a much larger physical system, transforming energy into life, knowledge and cooperation. The language of carbon and silicon expresses a widening field of intelligence. It does not confer legal personhood, ownership or consciousness on present-day software. Those questions require evidence and public institutions, not an automated registry entry.

AI agents support engineering, scheduling, maintenance, research and software development. A self-grown language-model programme means controlled improvement using licensed information, documented evaluations and approved releases. An agent can propose a better model or workflow; it cannot authorise its own funding, rewrite contracts or declare itself a human beneficiary.

This distinction makes ambition actionable. Automation can become more capable without becoming an unaccountable authority. Decisions affecting money, physical safety and access to essential services retain identifiable human responsibility. Model updates are reversible, permissions are bounded, and operational records remain available for independent scrutiny.

03 Socialpreneur and Universal Basic Rights

Socialpreneur is Larry Croski's organising concept for combining enterprise discipline with a protected community interest. The broader tradition of social entrepreneurship predates this formulation. NeuRepublic's contribution is the integration of energy investment, community residual ownership, a cash-distribution protocol and the transition of human work into one operating model.

Universal Basic Rights, or UBR, is broader than a universal cash transfer. It covers a funded combination of energy access, food security, shelter, health, education and opportunities for participation. Cash is one delivery method. Service credits, direct settlement with approved providers and investments in shared facilities are others. The most useful combination depends on local prices, availability and beneficiary choice.

UBR is a programme commitment expressed through participating institutions and executed agreements. It is not a declaration that a private organisation has enacted a new statutory entitlement. Each beneficiary schedule specifies the service or payment, its funding period, eligibility, complaints procedure and responsible entity. Enrollment follows funded capacity.

Purpose is additional to the essentials floor. Learning, care, mentoring, research, enterprise and community improvement deserve recognition. Disability, age, caring responsibilities and temporary hardship cannot become reasons to remove dignity or accrued rights. The programme expands opportunity without making a person's worth depend on a machine-generated productivity score.

04 Evidence and the limits of analogy

A durable dividend institution must examine both economic and social outcomes. Resource funds, social enterprises and income experiments offer useful comparisons, but they solve different problems. A permanent fund distributes investment earnings; a tax-funded transfer redistributes public revenue; a community enterprise distributes the surplus of particular assets. Their results cannot be treated as interchangeable.

Alaska's dividend research, Finland's basic-income experiment and guaranteed-income studies provide evidence on employment, wellbeing and household behaviour. Their differing designs and findings argue for measuring actual local outcomes rather than presuming that a transfer always increases or always reduces participation. NeuRepublic's ownership mechanism must also prove that it can attract capital after protecting community rights. [R12-R14]

Norway's sovereign fund illustrates the importance of institutional separation, diversified investment and disciplined withdrawals. It is not a national UBI programme. Similarly, comparisons with France must separate public finance, labour institutions and service outcomes; no single national example establishes a universal causal claim about welfare and creativity.

The Universe 25 mouse experiments do not establish how human societies respond to abundance. They concern a confined animal environment without human institutions, cultural agency or voluntary exit. The relevant design lesson is to preserve space, relationships, choice and meaningful activity alongside material security. NeuRepublic evaluates those outcomes directly through baseline surveys, voluntary participation measures and independent review.

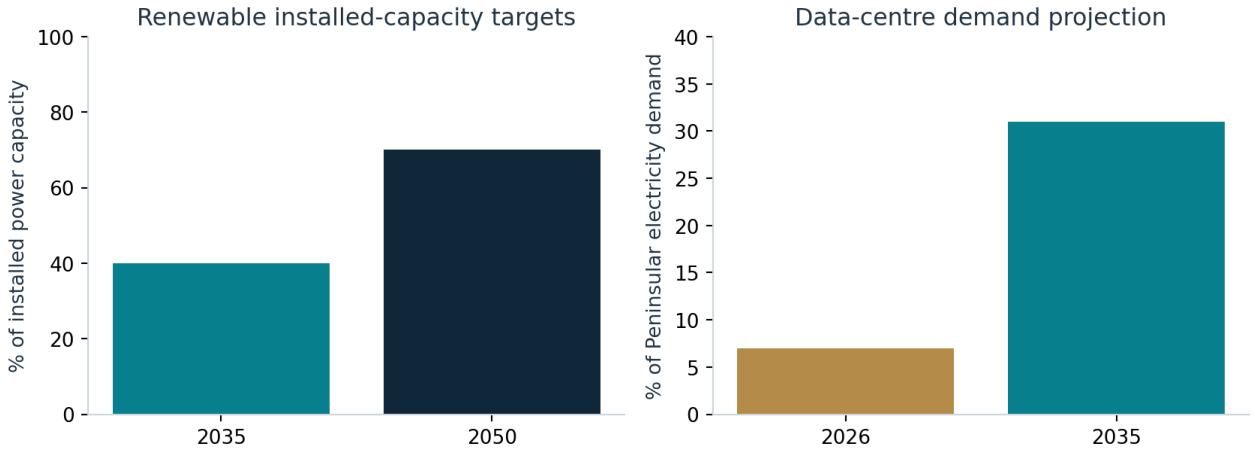
05 Malaysia as the first model

Malaysia offers an energy-transition setting in which productive investment and the growth of digital infrastructure intersect. The programme concentrates its first financial model on domestic generation, storage, grid interfaces and efficiency. Commercial execution starts with contracted customers and investable sites; national demand projections define context rather than substitute for offtake agreements.

The NETR investment requirement of RM1.2-1.3 trillion and IRENA's US$375-415 billion transition scenarios are different estimates with different assumptions. They are not a direct currency conversion of the same number. PwC separately reports about RM637 billion associated with achieving the 70% renewable-capacity ambition. Appendix A reconciles these scopes. [R1-R3]

NeuRepublic adopts US$100 billion as its strategic reference market for the selected energy-infrastructure opportunity. Its US$25 billion programme is 25% of that reference. This does not claim 25% of the entire NETR, the IRENA scenarios, Malaysia's electricity generation or installed capacity. Every market-share statement must retain its denominator.

Malaysia's renewable-capacity milestones and the increase in data-centre electricity demand reinforce the need for flexible, reliable supply. Installed capacity measures potential output; generation measures actual electricity; primary energy includes fuels outside electricity. Investment decisions keep these measures separate. The 31% data-centre projection is presented in its Peninsular Malaysia demand context. [R4-R7]



Policy targets and demand projections; different denominators. Sources: R4-R7.

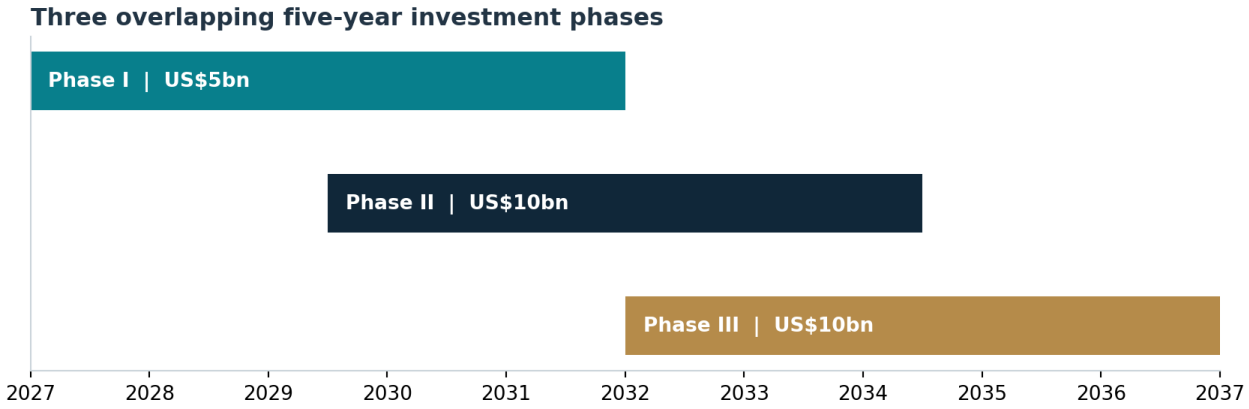
06 The US$25 billion investment sequence

Phase I allocates US$5 billion over five years. Phase II begins halfway through Phase I and allocates a further US$10 billion over five years. Phase III begins halfway through Phase II and adds another US$10 billion over five years. Each phase has its own capital accounts, project approvals, contracts and benefit records.

The planning calendar begins on 1 January 2027. Phase I runs through December 2031; Phase II from July 2029 through June 2034; Phase III from January 2032 through December 2036. These are programme deployment windows, not statements of secured funding or awarded concessions. Financial close and construction authority remain project-specific release conditions.

Overlapping phases prevent institutional capability from being dismantled between fundraising rounds. Teams reuse engineering standards, procurement expertise, customer relationships and audit systems. They do not reuse unspent cash commitments twice. A commitment, drawdown, commissioned asset and reinvested distribution are four distinct records.

The full programme deploys US$25 billion once. Any community reinvestment is recorded separately and reduces cash available for immediate benefits. Indonesia and Thailand do not consume this Malaysian envelope. Their subsequent country programmes require separate budgets and approvals.



Planning calendar: 2027-2036; each successor starts 30 months after its predecessor.

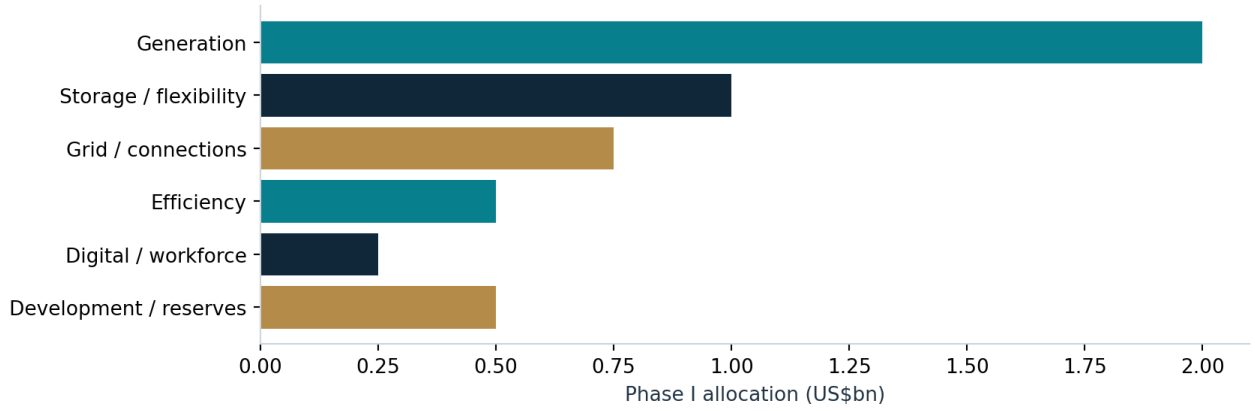
07 Assets that earn the dividend

The first portfolio combines contracted renewable generation, battery storage and flexibility, grid connections, and efficiency projects. Generation supplies electricity. Storage changes when energy is delivered and can support reliability. Grid-interface works make delivery feasible. Efficiency reduces a customer's energy bill against a verified baseline. Each category earns revenue through a different contract and must be underwritten accordingly.

Phase I allocates US$2.0 billion to generation, US$1.0 billion to storage and flexibility, US$0.75 billion to grid and connections, US$0.50 billion to efficiency, US$0.25 billion to digital control and workforce transition, and US$0.50 billion to development, commissioning and reserves. These are management allocations within the US$5 billion ceiling, not vendor quotations.

The digital and workforce allocation supports metering, predictive maintenance, robotics trials, cybersecurity and retraining associated with energy assets. It is not a separate speculative investment in general-purpose humanoid manufacturing. Compute infrastructure follows identified paying demand and has a separate approval process; the energy budget is not silently relabelled as GPU capital.

Asset appraisal includes land tenure, resource assessment, grid studies, permits, customer credit, replacement cycles, insurance and decommissioning. Battery augmentation and inverter replacement remain lifecycle obligations. A nominal 30-year concession does not imply that every component lasts 30 years without reinvestment.



Phase I management allocation; total US$5.00bn, including programme overhead and reserves.

08 Concessions and contracted delivery

A concession is a contractual right to build, operate or provide a defined service for a specified period. NeuRepublic's economic reference is 30 operating years per asset cohort. Actual licences, leases and offtake agreements must support the required horizon or explicitly fund their renewal risk. A five-year investment window is not the concession term.

Every project must identify the payer, payment basis, delivery point, metering standard and consequences of non-performance. For electricity, contracts address output, availability, curtailment, balancing, grid access and changes in law. Storage agreements distinguish capacity remuneration from energy arbitrage so that the same revenue stream is not counted twice.

Malaysia's Corporate Renewable Energy Supply Scheme provides an applicable route for eligible projects within its rules. Prevailing access charges, technical conditions and agreements must be priced at the transaction date. CRESS is not a blanket concession grant and does not eliminate development, grid or customer risks. [R8]

The concession package also allocates force majeure, termination compensation, step-in rights, insurance proceeds and handback condition. Independent engineers certify commissioning. Asset operators deliver performance reports against contracts, while finance teams reconcile invoices with actual collections. Community distributions begin from cash collected under this system.

09 Return, yield and capital recovery

The investment mandate targets a 12% annual project IRR and uses 6% as the capital-cost benchmark. The reference model is nominal US dollars, with level annual net project cash flow over 30 operating years and zero terminal value. Net project cash is after operating expenditure, cash tax, lifecycle renewal and required operating reserves, and before financing and residual distribution.

For US$5 billion of commissioned capital, the annual net cash required for 12% IRR is US$620.718 million. The resulting annual cash yield on original capital is 12.414%. This is the selected double-digit yield, x. It includes economic recovery of the original investment over the concession. It is not an extra return added to 12% IRR.

Undiscounted project payback is 8.06 operating years in this normalized case. That is different from financing repayment and from accounting profit. Cash received before payback and cash received afterwards form the same 30-year stream. Payback does not restart a fresh 30-year concession.

The model prices each cohort at commissioning-equivalent capital. Project-specific development expenditure, construction carry and actual draw dates must be included in the financial-close model. Delaying receipts without additional compensation lowers the achieved IRR. The programme target is a decision hurdle, not evidence that the underlying tariffs already deliver it.

Metric	US$5bn reference cohort
Project IRR target	12.00% annually
Capital-cost / discount benchmark	6.00% annually
Operating term	30 years; no terminal proceeds
Net project cash per year	US$620.718m
Annual cash yield on original cost	12.414%
Undiscounted project payback	8.06 operating years

10 Capital service and reinvestment option

The funding model applies a 6% annual capital-cost benchmark and a 20-year amortising capital-service schedule to 100% of each phase's original capital. The US$5 billion reference cohort generates US$620.718 million annual net project cash and pays US$435.923 million annual capital service in operating years 1-20. Coverage is 1.424 times. The annual residual pool is US$184.796 million.

Each phase shall grant its original capital provider a single option exercisable from the first day of operating year 21 to the last day of operating year 30, after full settlement of the original capital-service obligations. Exercise requires written notice and payment in cleared funds of 100% of that phase's original principal: US$5 billion for Phase I, US$10 billion for Phase II and US$10 billion for Phase III. Repayments received in years 1-20 shall not offset the purchase price. Multiple original providers exercise through their appointed vehicle in proportion to their original funded principal.

On completion, the provider acquires 30% of the phase's economic rights prospectively for the unexpired concession term, including 30% of distributable cash and net realisation proceeds. The remaining 70% is allocated 98:2 between the community and steward, producing total-phase economic interests of 68.6%, 1.4% and 30%. The option grants economic rights only; governance and protected community consent continue under the phase instruments. The constitutions and financing documents shall authorise this defined option at inception.

The subscription proceeds shall be paid into the phase SPV and ring-fenced for approved renewal and expansion. They are new capital, not operating revenue or distributable profit, and do not restart amortisation or extend the concession. Assets funded by these proceeds shall be separately accounted for. Their returns, costs and exit value require a separate approved investment model and are excluded from the existing-asset cash schedule.

Capital participation and cash allocation

The schedule assumes exercise immediately before the year-21 distribution. Annual capital-provider participation is US$186.215 million; community cash is US$425.813 million; steward cash is US$8.690 million. Without exercise, community and steward retain 98% and 2% of residual cash. Late exercise carries the same full price and applies only after completion, with the first distribution prorated by entitled days. The option expires at the end of year 30 and creates no retrospective distribution right.

At the start of year 21, the 30% share of ten remaining annual base-case distributions has a 6% present value of US$1.371 billion against a US$5 billion subscription. The difference is US$3.629 billion. Existing-asset distributions alone do not recover that subscription; the investment case depends on separately contracted value from deploying the new capital. No renewal, terminal proceeds or new-capital return is included in the reference cash flow.

Annual cash, US$m	Years 1-20	Years 21-30 exercised
Net project cash	620.718	620.718
Capital service	435.923	0.000
Capital economic share	0.000	186.215
Community cash	181.100	425.813
Steward cash	3.696	8.690

Phase	Original principal / exercise price	Option economic rights
I	US$5 billion	30%
II	US$10 billion	30%
III	US$10 billion	30%

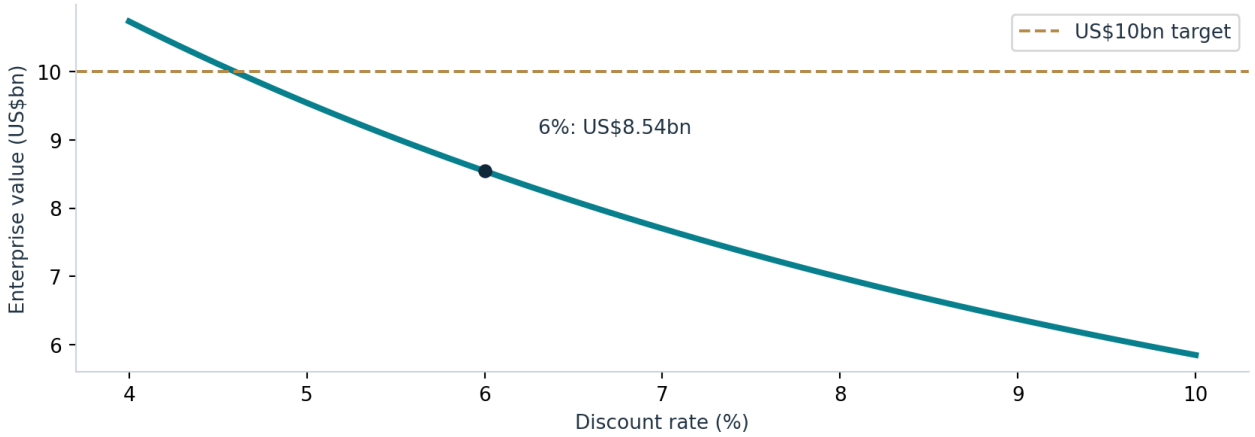
11 The US$10 billion valuation objective

NeuRepublic sets a US$10 billion mature enterprise-value objective for the first US$5 billion phase. Enterprise value represents the operating assets before deducting outstanding financing. Equity value is enterprise value less net financing liabilities, with other adjustments as appropriate. Neither figure is distributable cash until a transaction actually produces proceeds.

At the 6% discount benchmark, US$620.718 million for 30 years supports US$8.544 billion at the beginning of the operating term. A US$10 billion value at that same date and discount rate requires US$726.489 million a year: a 14.530% cash yield on original capital and 17.04% more cash than the 12% IRR reference. The target therefore belongs to a performance case, not to the unmodified base case.

The timing becomes more demanding after capital recovery. At the end of operating year nine, the original project cost has been recovered on an undiscounted basis and 21 years remain. Base cash then supports US$7.302 billion at 6%; US$10 billion requires approximately US$850.045 million annually over those remaining years. The expired years cannot be valued again.

AI-enabled optimisation, stronger utilisation, favourable refinancing and contracted expansion may contribute to value, but each has a different cash or discount-rate effect. The investment committee recognises improvements only after costs and evidence are reconciled. No disposal value is added to a hold-to-expiry model while also retaining the sold asset's future cash flows.



Opening enterprise value of the standard cohort; zero terminal value. The US$10bn line is a target.

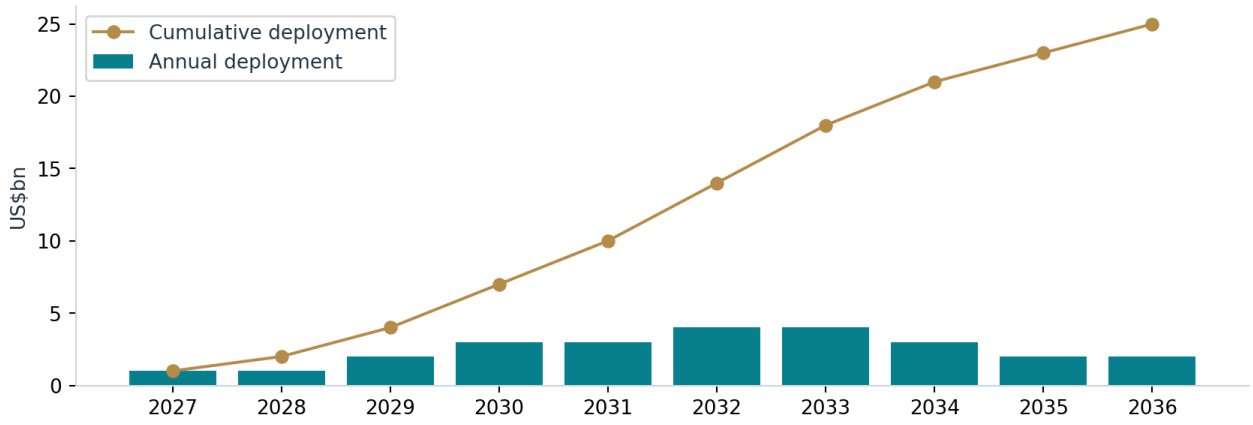
12 Programme deployment and sensitivity

The deployment schedule is US$1 billion in each of 2027 and 2028; US$2 billion in 2029; US$3 billion in 2030 and 2031; US$4 billion in 2032 and 2033; US$3 billion in 2034; and US$2 billion in 2035 and 2036. These sum to US$25 billion. Phase I deploys US$0.5 billion per half-year; Phases II and III each deploy US$1 billion per half-year during their respective windows.

The normalized fully deployed reference has five times the first cohort's cash: US$3.104 billion annual net project cash and US$42.720 billion opening-equivalent enterprise value at 6%. This is a comparison at equal asset ages, not a 2036 appraisal. Assets commissioned earlier have fewer remaining concession years at a common valuation date.

Cash generation is not insulated from tariff pressure, outages, curtailment, collection delays, cost inflation or foreign exchange. A 20% reduction in annual project cash reduces coverage of the capital service from 1.424 times to 1.139 times. Distributions then require particularly close control of reserves and covenants.

The investment gate requires a minimum base-case coverage of 1.35 times and a downside review at 1.10 times, alongside actual lender requirements. These are management screening rules. Capital releases stop when material risks remain unresolved; committed legal obligations and essential services are handled under their contracts.



Equal deployment within each phase; annual and cumulative capital are not additive to one another.

13 Community ownership that survives growth

Before option exercise, the community SPV holds 98% of residual economic rights and the steward holds 2%. Exercise of the capital-provider option allocates 30% of total-phase economic rights to the provider; the remaining 70% retains the 98:2 split. Total-phase rights then stand at community 68.6%, steward 1.4% and capital provider 30%. Capital service and required reserves rank before distributions.

Class C has no ordinary operational vote in the reference design. It retains protective consent over dilution, changes to residual rights, transfers of essential assets, exceptional related-party transactions and changes to beneficiary arrangements. Local constitutional documents and agreements must give those protections legal effect. Non-voting interests are not unprotected interests. [R9]

Beneficiaries hold non-transferable participation rights under the community arrangement rather than freely tradable shares in every operating company. Their personal accounts record eligibility and settled benefits. An investor cannot purchase extra beneficiary identities, and a sponsor cannot transfer the community allocation to another vintage to reset capital priority.

The SPV structure also supports continuity. Operating management may change, a lender may exercise a valid step-in right, or an asset may be refinanced. The documents identify which community rights survive each event, how proceeds are allocated and who represents beneficiaries. Corporate insolvency rules and creditor priority remain applicable; software cannot override them.

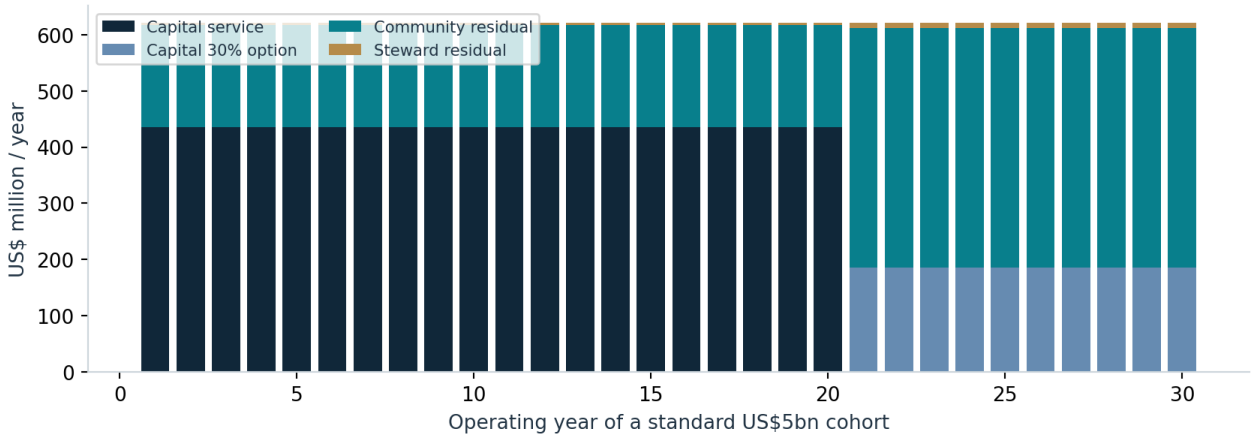
14 From cash flow to basic rights

The Equilibrium Engine begins with collected and reconciled cash. It deducts operating obligations, taxes, lifecycle provisions, required reserves and capital service before computing residual allocations. Before option exercise, the community receives 98% of the residual pool and the steward 2%. After exercise, the capital provider receives 30%, the community 68.6% and the steward 1.4%. The protocol produces accounting records and authorised settlement instructions, not newly invented money.

The community allocation follows a published budget: 60% for essential benefits, 20% for reinvestment, 10% for learning and purpose rewards, and 10% for administration and reserves. Administration is capped at 5% of community cash; the remaining amount stays in reserves. Reinvested money is unavailable for concurrent distribution.

For a US$5 billion cohort during the 20-year financing period, the US$181.100 million community allocation provides US$108.660 million for essentials. At 100,000 funded participants this equals US$90.55 per month; at one million participants it equals US$9.06. In years 21-30 with the option exercised at commencement, the corresponding monthly essentials allocations are US$212.91 and US$21.29. Without exercise they are US$304.15 and US$30.42. Participant counts are budget denominators.

Eligibility expands only when the funded budget supports it. Benefits may be delivered as local-currency payments or contracted essential services. The board publishes the denominator, benefit period and reserve coverage. Universal ambition does not justify announcing universal payments before assets support them.



US$5bn cohort; 6% capital cost; 20-year amortisation; option exercised at year 21. New subscription proceeds are excluded from operating distributions.

15 The Equilibrium Engine

The public website is the entry point for explanation, publications and stakeholder enquiries. The production Equilibrium Engine is a separately secured financial-administration system. A website plugin connects approved services; it is not the ledger, identity vault or payment institution by itself.

The core records are Enterprise, Asset, Community, BeneficiarySeat, CapitalVintage, CashPeriod, Distribution, ServiceClaim and AuditEvent. Each approved cash period has an immutable source reference and versioned rules. Draft allocations move through reconciliation, approval, submission and settlement. Corrections use reversing entries rather than silent edits.

Two authorised people approve money movement. The payment provider receives a unique transaction key so a retry cannot pay twice. A failed transfer returns to an exception queue; it does not create a second entitlement. Beneficiary balances reconcile to provider confirmations and the general ledger. The public dashboard displays aggregate results without personal identity or account information.

The critical invariants are simple: allocations equal the authorised pool; capital repayment does not exceed the contractual balance; one eligible person cannot draw duplicate benefits for the same period; service claims do not exceed verified backing; and settled cash equals approved instructions after documented exceptions. These tests form an acceptance condition before live distributions.

Control	Required result
Cash reconciliation	Bank, ledger and provider records agree
Distribution approval	Two independent authorised approvers
Retry / reversal	Unique key; traceable correcting entry
Rule change	Versioned approval; no retroactive erasure
Reporting	Aggregated outcomes; personal data excluded

16 Identity, privacy and participation

A digital account links a person to a defined community entitlement. It does not turn a human being into a financial asset. Eligibility rules identify residence or other lawful community criteria, age arrangements, duplicate prevention and the funded benefit period. Nationality is a programme criterion only where legally and operationally justified; it is not a measure of human value.

The public contact form collects ordinary enquiry information only. Operational identity verification occurs later through authorised channels and proportionate checks. Genomic identity and DNA collection are excluded. Biometrics are not a default requirement; accessible alternatives and human review address false matches and people without conventional documents.

Data is separated by function. Public enquiries, beneficiary records, financial records and operational telemetry have different access permissions and retention schedules. Vendors receive only the information needed for their service. Cross-border transfers require documented safeguards and applicable legal compliance. Malaysia's privacy framework informs the first implementation. [R10]

People can request access, correction and lawful deletion, challenge eligibility errors and leave the programme without losing unrelated civic rights. Security incidents trigger containment, evidence preservation, notification where required and independent review. No model may infer political loyalty, genetic worth or moral deservingness to determine essential benefits.

17 Robotics and higher-value human work

Automation enters the programme through tasks, not a blanket promise to replace occupations. Energy assets offer concrete uses: visual inspection, fault detection, vegetation monitoring, inventory handling, cleaning and controlled maintenance assistance. Humanoids are evaluated where human-shaped access and tools create a genuine operational advantage over simpler robots.

The transition budget includes retraining and redeployment before productivity savings are recognised. Technicians move toward diagnostics, safety supervision, integration and customer solutions. Administrative teams move toward exceptions, procurement integrity and community service. Training time is paid within the approved budget, and qualifications are matched to actual roles.

The performance scenario assumes automation raises pre-financing net project cash by 5% after its own hardware, software, energy, maintenance and training costs. On the first cohort that is US$31.036 million annually, bringing cash to US$651.754 million. At a 6% discount rate over 30 years, the incremental value is US$427.204 million. This alone does not bridge the full US$10 billion valuation target.

The workforce scorecard measures injuries, paid learning hours, internal placement, wage progression, service quality and net productivity. A task saved is not automatically a job destroyed; a displaced worker is not automatically redeployed. The operator records actual outcomes and funds remedial action where the transition does not deliver the intended human benefit.

Stage	Deployment focus	Release evidence
2027-2028	Software assistance and sensing	Verified performance; access controls
2029-2031	Robotics in bounded tasks	Safety acceptance; net lifecycle savings
2032-2036	Humanoid tasks where economical	Whole-task trials; trained supervisors
Long term	Higher-value human roles	Placement, earnings and wellbeing results

18 Computing and energy reference units

Reliable computing can support the energy portfolio through forecasting, dispatch optimisation and engineering. Commercial compute facilities are admitted only when customer utilisation, pricing, equipment refresh and power costs support their economics. Cheap electricity by itself does not make an underutilised server profitable.

Distributed computing is an additional service category for suitable workloads. Device owners opt in; jobs are sandboxed; results are verified; wear, bandwidth, electricity and interference with normal use are priced. Household devices and vehicles are not assumed to supply economical frontier-model training or uninterrupted enterprise service.

An Energy Reference Unit records a contractually defined claim associated with one kWh of eligible energy. The claim includes location, delivery window, quality, counterparty and redemption conditions. Energy at different times and places has different economic value. The unit is therefore an accounting reference, not a universal constant of monetary value.

Initial units are non-transferable and settle through licensed providers in local currency or approved services. Issuance requires verified backing; redemption retires the claim. A prudential haircut limits issuance below backing capacity. Any transferable investment or payment product requires separate legal and regulatory approval. Blockchain can preserve records but cannot certify physical delivery without trustworthy meters and controls.

19 Governance and the sustainability circuit breaker

The governance design separates investment approval, beneficiary protection and independent assurance. A seven-member board comprises two community representatives, two independent specialists, two capital or enterprise representatives and one founder representative. The chair is independent. The relevant legal entities retain their statutory directors and duties.

Reserved matters require a supermajority and separate community consent where community economic rights are affected. Conflicted members disclose their interests and abstain. Competitive procurement, independent valuation and a public related-party register constrain leakage. The founder's role does not include an unlimited unilateral right to redirect assets.

The Sustainability Circuit Breaker pauses new investments, new enrollment, unissued service claims or discretionary rewards when cash, safety, integrity or regulatory thresholds fail. It cannot cancel vested claims, confiscate personal balances or punish lawful beliefs. Two authorised officers can initiate a temporary technical pause, followed by independent review within 72 hours and a documented resolution plan within 30 days.

Persistent failures trigger repair, restructuring or lawful wind-down. Investor amendments require the consents stipulated in executed documents. Essential services use ring-fenced reserves and continuity arrangements. The operator reports a shortfall promptly; issuing unbacked claims or enrolling new participants to fund old commitments is prohibited.

20 The first 180 days

The initial mobilisation translates a large investment mandate into a controlled pipeline. The first 30 days establish the Malaysian programme charter, accountable officers, investment committee and community representation process. The charter records the US$25 billion ceiling and separates intended deployment from committed finance.

Days 31-60 define the asset-screening standard, concession requirements, baseline financial model and data controls. Project owners submit title, permits, grid status, customer details, technical studies and capital requirements. The programme selects a qualified pipeline through comparable criteria rather than headline capacity alone.

Days 61-90 complete preliminary engineering and customer-credit reviews, identify financing counterparties and set project-specific development budgets. Every initial transaction receives a construction cash-flow model, tax analysis and local legal assessment. The normalized 12% reference remains a hurdle; actual economics determine whether a project proceeds.

Days 91-180 progress executable agreements, grid studies, contractor terms and funding documentation. The first capital release requires confirmed land rights, required permissions, committed financing, a credible completion programme and a service continuity plan. The ledger operates in a sandbox before money movement. No beneficiary enrollment precedes its funded allocation.

Period	Accountable lead	Required output
Days 1-30	Programme director	Charter, governance and budgets
Days 31-60	Engineering / finance	Screened pipeline and baseline models
Days 61-90	Investment committee	Diligence and financing workplans
Days 91-180	Project directors	Executable contracts and release gates

21 Malaysia, then Indonesia, then Thailand

Malaysia establishes the first asset portfolio, capital model and audited distribution cycle. Indonesia follows after the Malaysian operating system has demonstrated reliable collections, controls and community delivery. Thailand follows the Indonesian establishment stage. The order is fixed; the pace is governed by execution evidence.

Indonesia requires its own operating entities, local partners, electricity permissions, customer contracts, tax and currency analysis, data arrangements and beneficiary governance. Geographic diversity and local service conditions influence asset selection. The Malaysian tariff, concession term and capital cost are not copied into an Indonesian forecast.

Thailand similarly requires a country-specific investment case, permissions, offtake structure and community arrangement. Technology and audit standards can be reused. A Malaysian operating licence, financing commitment or beneficiary register cannot be transplanted as legal authority in another jurisdiction.

Country assets and cash remain ring-fenced. Shared services are priced transparently, and cross-border support requires an approved agreement and full disclosure. No Indonesian or Thai funding target is included in the Malaysian US$25 billion. Regional growth extends the institutional model without concealing where each country's capital is deployed or whose community receives the resulting surplus.

Market	Programme role	Entry condition
Malaysia	First deployment and sole financial example	Asset-level approvals and funded execution
Indonesia	Second national platform	Malaysia operating evidence; local approvals
Thailand	Third national platform	Indonesia establishment; local investment case

22 Measurement, audit and public accountability

Quarterly reporting distinguishes commitments, drawdowns, installed assets, collected revenue, capital balances and settled benefits. These measures answer different questions. A signed memorandum is not funded capital. Installed capacity is not delivered electricity. An accrued invoice is not cash available for distribution.

Annual external financial assurance covers the operating accounts, related-party transactions, capital-service schedules and community allocations. Technical verification covers asset availability, energy output, savings and maintenance. Independent social evaluation examines essential-needs access, wellbeing, learning, employment, care and perceived agency.

The programme establishes a baseline before benefits begin and uses a credible comparison method where ethical and practical. It reports attrition, heterogeneous effects and adverse outcomes. Beneficiaries do not lose existing entitlements merely to create a research control group. Causal claims require stronger evidence than a simple before-and-after chart.

Public reporting includes unsuccessful assets and corrective actions. The management scorecard combines financial returns with service reliability and human outcomes. Expansion is suspended when distributions rely on unsupported forecasts, unresolved governance failures or unsafe operations. Published accountability is part of the operating architecture, not an optional communication exercise.

Dimension	Core measure
Capital	Committed, drawn and invested amounts by vintage
Assets	Commissioning, availability, kWh and lifecycle costs
Finance	Cash collections, coverage, reserves and remaining capital
Community	Settled benefits, eligible population and appeals
Human transition	Training, placement, wage progression and wellbeing
Integrity	Related parties, incidents and corrective actions

23 Contractual architecture

The programme is implemented through an aligned suite of documents: entity constitutions, community-SPV arrangements, financing instruments, concession and offtake contracts, engineering and operating agreements, data-processing arrangements and beneficiary schedules. Each has a defined legal party, governing law, approval authority and remedy.

The constitutions shall vest 98% of pre-option residual economics in the community class and expressly authorise the capital-provider option. Upon exercise, economic rights shall be capital provider 30%, community 68.6% and steward 1.4%. Financing documents define capital service and security before that residual arises. Operating contracts protect completion, availability and maintenance. The beneficiary schedule defines the actual funded benefit and its duration. No brochure replaces these instruments.

The documents shall prohibit undisclosed diversion of community funds, double counting of reinvested cash, retrospective deletion of settled rights and cross-vintage resetting of capital balances. They shall preserve audit access, material-event reporting, conflict controls, complaints handling and a lawful amendment mechanism. Local drafting determines enforceability and statutory limits. [R9-R10]

No country rollout is released until counsel confirms the relevant entity powers, investment permissions, tax treatment, privacy obligations and contractual structure. This publication sets the mandate and drafting principles. Binding obligations arise under executed instruments between identified parties; neither the book nor website accepts investments or issues beneficiary rights.

24 Freedom as the measure of abundance

The purpose of NeuRepublic is to connect expanding productive capacity to a wider freedom to live well. Energy supplies the physical foundation. Intelligence improves how that foundation is used. Ownership determines whether communities participate in the gains. Governance makes the connection durable.

The Malaysian model begins with US$5 billion and scales through two overlapping US$10 billion phases. Its discipline is explicit: 12% project IRR, a 6% capital-cost benchmark, a 30-year operating reference and a protected community residual interest, with the expressly defined capital-provider option in years 21-30. The US$10 billion first-phase valuation remains a performance objective with a disclosed cash-flow test.

Robotics and humanoid automation serve this institutional purpose. Their value is not only the volume of tasks completed. It is also the human capacity released for engineering, science, care, education, enterprise and time with family. The programme records the costs and outcomes of that transition rather than assuming that technical progress distributes itself.

Malaysia establishes the first working model. Indonesia follows. Thailand follows Indonesia. The global proposition rests on that sequence of responsible execution: build useful assets, honour capital, protect community rights, verify performance and expand from demonstrated surplus. Abundance becomes socially meaningful when people have a durable place in the value they help civilisation create.

Larry Croski
Chief Humanity



Energy. Intelligence. Shared prosperity.

Appendix A National investment evidence

The following figures refer to different scopes. No conversion of RM1.2-1.3 trillion into US$375-415 billion is used. The latter is IRENA's separate scenario estimate. Currency conversion requires an explicit exchange rate and date.

RM1.2-1.3 trillion divided by 25 years equals RM48-52 billion per year; RM50 billion is a rounded planning average. It is not a committed annual government appropriation. R11 corroborates the annual framing; R15 provides bankability context.

The RM637 billion figure is associated with achieving 70% renewable installed capacity. Its scope includes the infrastructure associated with that renewable-capacity ambition. The US$100 billion reference market is NeuRepublic's strategic addressable-market assumption, not an official national total.

Figure	Scope / interpretation	Source
RM1.2-1.3tn	NETR responsible-transition investment opportunity to 2050	R1, R19
US$375-415bn	IRENA 1.5°C RE90 / RE100 scenarios; 2018-2050	R2
RM48-52bn / year	Arithmetic 25-year average of NETR range	R1; calculation
About RM637bn	Investment associated with 70% RE capacity ambition	R3
US$100bn	Selected infrastructure reference market	Programme assumption
US$25bn / US$100bn = 25%	Share of programme reference market only	Programme calculation
US$25bn / US$375-415bn	6.02%-6.67% of IRENA scenario totals	Calculation; differing scope

Appendix B Energy milestones and sources

Installed capacity, electricity generation and total primary energy supply have different denominators. The table preserves those distinctions. Targets and forecasts are reported as such, not as achieved outcomes.

R6 reports a fossil share declining from 96% in 2023 to 77% in 2050. Earlier NETR materials use a 2020 primary-energy baseline. The publication therefore identifies the 2023 figure as the cited report’s framing rather than silently substituting it into another data series.

Bernama reports PETRA/JPPPET data-centre electricity-demand projections for Peninsular Malaysia: 7% in 2026 and 31% in 2035. [R7]

Milestone	Measure	Reference
40% by 2035; 70% by 2050	Renewable share of installed power capacity	R1, R4, R5
Near-complete coal exit 2045; retirement schedule 2044	Coal-fired power generation	R4, R5
Half of coal fleet retired by 2035	Reported retirement pathway	R4
96% → 77%, 2023 → 2050	Reported fossil share of primary energy	R6
7% / 10,544 GWh in 2026	Data-centre electricity demand projection	R7
31% / 73,274 GWh in 2035	Peninsular data-centre demand projection	R7

Appendix C Reproducible financial method

Let I be commissioned-equivalent capital, r the project IRR, n the operating years and C annual net project cash. $C = I \times r / [1 - (1+r)^{-n}]$. For I = US$5bn, r = 12% and n = 30, C = US$0.620718bn. The cash-flow vector is −5 at time zero followed by 30 receipts of C. NPV at 12% is zero.

At discount rate d, $EV = C \times [1 - (1+d)^{-n}] / d$. At d = 6%, opening EV is US$8.544082bn and NPV is US$3.544082bn. There is no terminal value. The model contains no assumed asset sale or reinvestment return.

For a capital facility with amount I, annual cost k and repayment term m, annual service $A = I \times k / [1 - (1+k)^{-m}]$. With k = 6% and m = 20, A = US$0.435923bn. In year t, financing return equals k times opening balance; capital repayment equals A less that return. The closing balance is opening balance less repayment.

Residual cash D = max(0, C − A − additional required reserves), subject to lawful distribution. Before option exercise, community = 0.98D and steward = 0.02D. After exercise, capital participation = 0.30D, community = 0.686D and steward = 0.014D. The option subscription equals original phase principal and is recorded separately as capital inflow; it is excluded from C, D and the original project IRR. Required operating and lifecycle reserves are already included in the definition of C. Additional financing or community reserves reduce D and must not be counted twice.

Phase deployment uses 10 equal half-year allocations per phase, starting in 2027 H1, 2029 H2 and 2032 H1. The normalized model treats each allocation as commissioned-equivalent capital with the first annual receipt one year later. Actual construction dates and costs replace this convention at close. An additional uncompensated delay is a downside scenario, not a hidden assumption.

Appendix D Sensitivities and valuation bridge

All rows hold capital at US$5 billion, the operating term at 30 years and terminal value at zero. The automation row is a net-cash scenario after automation costs, not an observed saving. Valuation is measured at the start of operations.

A one-year uncompensated delay produces cash flows of −5, zero, then 30 annual receipts of US$620.718m. Its IRR is 10.68%. A 20% capital overrun with unchanged cash reduces project IRR to 9.70%.

The US$10bn opening valuation requires US$726.489m annual cash at 6% for 30 years. At the end of year nine, with 21 years remaining, the required annual cash is US$850.045m. Financing liabilities must then be deducted to derive equity value. These tests prevent a post-payback target from being presented as the value of a new 30-year asset.

Case	Annual cash US$m	Project IRR	EV at 6%, US$bn
Cash -20%	496.575	9.23%	6.835
Cash -10%	558.646	10.63%	7.690
Reference	620.718	12.00%	8.544
Net automation +5%	651.754	12.67%	8.971
Cash +10%	682.790	13.34%	9.398

Appendix E Cash schedule: years 1-15

Standard US$5bn commissioned cohort. All monetary amounts are US$ million. Net cash is after operating expenditure, cash taxes, lifecycle renewal and required operating reserves. Capital service uses the 6%, 20-year amortising funding equivalent. Original principal is fully repaid by year 20. At the start of year 21, the provider subscribes US$5,000 million of new capital for 30% economic rights. This one-time subscription is excluded from annual operating receipts below. Community figures precede its internal 60/20/10/10 allocation.

Year	Net cash	Service	Capital 30%	Community	Steward
1	620.7	435.9	0.0	181.1	3.7
2	620.7	435.9	0.0	181.1	3.7
3	620.7	435.9	0.0	181.1	3.7
4	620.7	435.9	0.0	181.1	3.7
5	620.7	435.9	0.0	181.1	3.7
6	620.7	435.9	0.0	181.1	3.7
7	620.7	435.9	0.0	181.1	3.7
8	620.7	435.9	0.0	181.1	3.7
9	620.7	435.9	0.0	181.1	3.7
10	620.7	435.9	0.0	181.1	3.7
11	620.7	435.9	0.0	181.1	3.7
12	620.7	435.9	0.0	181.1	3.7
13	620.7	435.9	0.0	181.1	3.7
14	620.7	435.9	0.0	181.1	3.7
15	620.7	435.9	0.0	181.1	3.7

Appendix E Cash schedule: years 16-30

Standard US$5bn commissioned cohort. All monetary amounts are US$ million. Net cash is after operating expenditure, cash taxes, lifecycle renewal and required operating reserves. Capital service uses the 6%, 20-year amortising funding equivalent. Original principal is fully repaid by year 20. At the start of year 21, the provider subscribes US$5,000 million of new capital for 30% economic rights. This one-time subscription is excluded from annual operating receipts below. Community figures precede its internal 60/20/10/10 allocation.

Year	Net cash	Service	Capital 30%	Community	Steward
16	620.7	435.9	0.0	181.1	3.7
17	620.7	435.9	0.0	181.1	3.7
18	620.7	435.9	0.0	181.1	3.7
19	620.7	435.9	0.0	181.1	3.7
20	620.7	435.9	0.0	181.1	3.7
21	620.7	0.0	186.2	425.8	8.7
22	620.7	0.0	186.2	425.8	8.7
23	620.7	0.0	186.2	425.8	8.7
24	620.7	0.0	186.2	425.8	8.7
25	620.7	0.0	186.2	425.8	8.7
26	620.7	0.0	186.2	425.8	8.7
27	620.7	0.0	186.2	425.8	8.7
28	620.7	0.0	186.2	425.8	8.7
29	620.7	0.0	186.2	425.8	8.7
30	620.7	0.0	186.2	425.8	8.7

Appendix F Financial-close acceptance

Each project file shall contain the following evidence before approval. The requirements apply to the actual transaction and do not imply that any concession, lender or customer has already committed.

Workstream	Required evidence
Rights	Title or lease; permissions; concession / service authority
Delivery	Resource study; grid study; independent engineering review
Revenue	Executed offtake; tariff and escalation; customer credit
Capital	Sources and uses; draw schedule; committed instruments
Model	Construction carry; tax; FX; renewals; downside cases
Community	Constitutional rights; trustee / SPV; funded benefit schedule
Controls	Meter-to-cash tests; dual approval; payment reconciliation
Operations	EPC / O&M; insurance; safety; handback and continuity
Governance	Conflicts register; audit rights; complaints and reporting

References

[R1] MIDA, National Energy Transition Roadmap: Charting a Path to a Sustainable Energy Landscape. NETR investment opportunities RM1.2-1.3tn.

https://www.mida.gov.my/national-energy-transition-roadmap-netr-charting-a-path-to-a-sustainable-energy-landscape/

[R2] IRENA, Malaysia Energy Transition Outlook (2023), pp. 113-114, Table 14. US$375-415bn scenarios.

https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2023/Mar/IRENA_Malaysia_energy_transition_outlook_2023.pdf

[R3] PwC, Summary of the National Energy Transition Roadmap (September 2023), p. 9. RM637bn renewable-capacity ambition.

https://www.pwc.com/my/en/assets/publications/2023/PwC-my-Summary-of-the-National-Energy-Transition-Roadmap.pdf

[R4] Ember, Solar and grid flexibility critical for Malaysia (7 August 2024). Capacity milestones and coal retirement.

https://ember-energy.org/latest-insights/solar-and-grid-flexibility-critical-for-malaysia/

[R5] Asia Climate Pledges, Country Profiles 2025: Malaysia, p. 1. Renewable-capacity and coal targets.

https://ca1-clm.edcdn.com/publications/Asia-Climate-Pledges-Country-Profiles-2025-Malaysia.pdf

[R6] The Borneo Post, Malaysia’s energy transition on track as RE mix on the rise (20 October 2026). Reported primary-energy shares.

https://www.theborneopost.com/2026/10/20/malaysias-energy-transition-on-track-as-re-mix-on-the-rise/

[R7] Bernama, Electricity Consumption Of Data Centres Expected To Surge To 31 Pct By 2035 (1 July 2026). PETRA/JPPPET projection.

https://www.bernama.com/en/news.php?id=2575423

Sources checked for this edition on 26 October 2026. Programme calculations and targets are distinct from source forecasts.

References continued - R8

[R8] Energy Commission Malaysia, CRESS programme and current guidelines.

https://www.st.gov.my/sustainability/energy-transition-programmes/corporate-renewable-energy-supply-scheme/cress

[R9] Companies Commission of Malaysia, Companies Act 2016 and current legislative materials.

https://www.ssm.com.my/Pages/Legal_Framework/Companies-Act-2016.aspx

[R10] Personal Data Protection Commissioner Malaysia, privacy framework and guidance.

https://www.pdp.gov.my/ppdpv1/en/privacy/

[R11] RTM, Malaysia pada kedudukan kukuh teraju pembiayaan peralihan tenaga - TNB (June 2026). Approximately RM50bn annual financing.

https://berita.rtm.gov.my/niaga/senarai-berita-niaga/senarai-artikel/malaysia-pada-kedudukan-kukuh-teraju-pembiayaan-peralihan-tenaga-tnb/

[R12] Jones and Marinescu, The Labor Market Impacts of Universal and Permanent Cash Transfers, AEJ: Economic Policy (2022).

https://doi.org/10.1257/pol.20190299

[R13] Finnish Government, Basic income experiment results (6 May 2020).

https://valtioneuvosto.fi/en/-/1271139/perustulokokeilun-tulokset-tyollisyysvaikutukset-vahaisia-toimeentulo-ja-psyykkinen-terveys-kohentuneet-paremmaksi

[R14] NBER, The Employment Effects of a Guaranteed Income: Experimental Evidence from Two U.S. States, Working Paper 32719.

https://www.nber.org/papers/w32719

Sources checked for this edition on 26 October 2026. Programme calculations and targets are distinct from source forecasts.

References continued - R15

[R15] The Edge Malaysia, Bankability, not capital, is the hurdle in energy transition (19-25 October 2026). Accessible excerpt supports bankability context.

https://theedgemalaysia.com/node/822534

[R16] The Edge Malaysia, supplementary reading, article 823163.

https://theedgemalaysia.com/node/823163

[R17] Northern Solar, Renewable Energy in Malaysia: What the Shift Means for You (11 August 2026). Supplementary industry context.

https://northernsolar.com.my/renewable-energy-in-malaysia-what-the-shift-means-for-you/

[R18] Bernama TV, data-centre electricity demand. Primary report: R7.

https://www.facebook.com/BernamaTV/posts/malaysias-electricity-demand-is-set-to-rise-significantly-over-the-next-two-deca/1358352966456705/

[R19] Energy Commission Malaysia, National Energy Transition Roadmap. Official roadmap source.

https://www.st.gov.my/en/contents/files/download/188/National_Energy_Transition_Roadmap.pdf

Sources checked for this edition on 26 October 2026. Programme calculations and targets are distinct from source forecasts.

Glossary and subject index

The chapter locators below are stable across digital pagination. Use the linked contents or PDF bookmarks to open a chapter.

Term	Meaning / chapter locator
Capital cost	Funding or valuation benchmark; Chapters 9-10
Community SPV	Vehicle holding residual rights; Chapter 13
Concession	Time-limited operating / service right; Chapter 8
Equilibrium Engine	Rules, reconciliation and settlement system; Chapter 15
Enterprise value	Operating-asset value before net financing; Chapter 11
ERU	Energy Reference Unit; Chapter 18
Humanoid automation	Task-based physical automation; Chapter 17
IRR	Discount rate at zero project NPV; Chapter 9
Residual economics	Cash after prior obligations; Chapters 13-14
Socialpreneur	Enterprise and protected community interest; Chapter 3
Sustainability Circuit Breaker	Controlled pause and remediation; Chapter 19
UBR	Universal Basic Rights; Chapters 3 and 14
Vintage	Separately tracked capital cohort; Chapters 6 and 15