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(Almaty, Kazakhstan)**BUILD, BUY, OR PARTNER? ENTRY MODE SELECTION AND RISK GOVERNANCE FOR WIND POWER INVESTMENT IN KAZAKHSTAN**

Abstract. Foreign wind power investors in Kazakhstan can build, acquire during construction, or develop with partners. Each route relocates uncertainty. This article develops a comparative qualitative framework for choosing among these modes and governing their risks. Public records concerning Zhanatas, Shokpar, Dostyk, two different Arkalyk assets, and the announced 1 GW program form the evidence base. The RIGOR framework assesses Rights completeness, Information reliability, Governance complementarity, Option value, and Residual risk. An integrated acquisition model then links eight diligence domains to legality, loss pathway, liability allocation, and post-closing leadership. Public facts, allegations, and practitioner interpretations are separated. Greenfield development suits investors with patient development capability and a need for design control. Construction-stage acquisition can save time when rights are formed and evidence is auditable, but it concentrates interface and completion risk. Joint development suits high local complementarity and program optionality when governance rights are explicit. Dostyk also shows how publicly reported credit insurance and RMB project finance can support an acquired project without replacing asset diligence. The article avoids confidential transaction data.

Keywords: entry mode; wind power; Kazakhstan; greenfield development; construction-stage acquisition; joint development; due diligence; project finance; risk governance

1. Introduction

Renewable-market entry is a choice about which uncertainties an investor will own. A greenfield investor accepts development uncertainty for design control. An acquirer pays for elapsed time but inherits earlier decisions. A joint developer shares resources but must govern shared control. The relevant question is which mode creates the most governable combination of rights, evidence, capability, and residual risk.

Transaction cost economics links internalization to contractual hazards and asset specificity [1], while entry-mode research connects those hazards to control [2]. Greenfield and acquisition choices also reflect capability transfer, target availability, integration cost, and institutional distance [3] [4]. Real-options research explains why staged commitment can preserve expansion value under uncertainty [5] [6] [7].

In an emerging market, the target may be partly constructed rather than operational. This brownfield form combines local embeddedness with unfinished work [8]. Its success depends on entry choice, integration design, and the conversion of deal completion into operating value [9] [10] [11].

Wind projects add high capital intensity, site-specific resources, grid dependence, and policy exposure [12] [13]. Capital providers accept different combinations of construction and revenue risk [14]. Entry and financing must therefore be considered together.

Kazakhstan offers observable examples of greenfield development, construction-stage acquisition, and program partnership. This article asks:

1. How should a foreign wind power investor select among building, buying, and partnering in Kazakhstan? 2. How should due diligence and post-entry governance be integrated when the selected route is a construction-stage acquisition?

The comparison uses public documents. It excludes transaction prices, sellers, acquisition dates, debt terms, and internal information. Experience-based inferences are labelled practitioner interpretation so that fact, allegation, and judgment remain separate.

2. Institutional and analytical foundations

2.1 The project as a bundle of rights and interfaces

A wind project is a bundle of rights, assumptions, contracts, relationships, works, claims, and obligations. These mature at different speeds. Land may be valid while the grid solution is provisional. Equipment may be contracted while substation responsibility is unclear.

Kazakhstan's renewable law defines support mechanisms [15]. Auction materials published by the Financial Settlement Centre explain how tariff rights are formed [16]. These rules reduce uncertainty, but site, grid, corporate history, and execution remain project-specific.

Maturity should not be reduced to construction percentage. Rights completeness asks whether reliable evidence proves the ability to build, connect, sell, collect cash, operate, and enforce contracts. Physical progress and rights completeness may diverge.

2.2 Three entry modes

Greenfield development starts before core rights and design are assembled. It provides design control but carries delay and failure risk.

Construction-stage acquisition follows material development decisions but precedes stable operation. It saves time while transferring frozen design choices, work quality, contractor interfaces, permit history, and stakeholder commitments.

Joint development combines complementary development, capital, technology, public coordination, or grid capability. It can preserve options but may create deadlock and blurred accountability.

A project may move across modes. Entry is therefore a governed sequence of commitments.

2.3 Comparative qualitative design and evidence protocol

The comparative case design selects projects with different combinations of mode, maturity, partnership, and finance. Country context follows the International Energy Agency review [17]. Project evidence comes primarily from government records, multilateral lenders, institutional announcements, and insurer reporting.

Three evidence classes are used throughout:

Public fact is traceable to an official record or attributable institutional disclosure.

Public allegation records an attributed complaint without establishing its merits.

Practitioner interpretation is the author's experience-based analysis, not confidential evidence or verified project fact.

This protocol prevents observed outcomes from becoming unsupported causal claims.

The case selection reflects the author's professional experience with greenfield development, construction-stage acquisition, and portfolio development in Kazakhstan. That experience informs the research questions and interface analysis, but it is treated as positionality rather than independent proof of a project fact. No confidential transaction record or unpublished performance result is used.

Table 1. Comparative case design and evidence boundary

Case or program	Publicly observable mode	Analytical purpose	Evidence boundary
Zhanatas, 100 MW	Jointly owned greenfield development	Control, partner complementarity, and multilateral bankability	Public lender and project disclosures only
Shokpar, 100 MW	Adjacent co-development	Repeat-project learning and the need to reset site-specific diligence	Public lender disclosures and an attributed public complaint
Dostyk, 50 MW	Acquisition during construction	Completion interfaces, acquisition diligence, insurance, and RMB finance	Public insurer and project reporting, with commercial deal details excluded
Arkalyk-Kostanay, 48 MW as built	Auction-originated greenfield project	Separation of tender scope, completed asset, and ownership-chain evidence	Official auction and regional records, without inferring later ownership from name alone
Arkalyk-Akmola, 15 MW	Subproject within the CPIH 220 MW portfolio	Identity control and portfolio record matching	AIIB portfolio and non-technical summary only
Announced 1 GW program	Program-level partnership	Governance of scale, storage, infrastructure, and phased commitment	Dated public announcements, not evidence of final investment or completion

3. The RIGOR entry mode selection framework

3.1 Five decision dimensions

The proposed RIGOR framework evaluates five dimensions before an investor chooses to build, buy, or partner.

R: Rights completeness. Land, permits, tariff position, grid rights, approvals, and contracts must be valid, transferable, consistent, and sufficient for the next gate. Low completeness favors greenfield work if the investor can create the missing rights. Acquisition requires rights that survive control transfer.

I: Information reliability. A large data room may still fail to prove the design basis. Reliable evidence has origin, version control, cross-discipline reconciliation, and independent testing where material. Weak evidence favors staged commitment or conditions.

G: Governance complementarity. A partner matters when needed capability, such as public coordination, permitting, grid knowledge, finance, or localization, is hard to contract. Complementarity needs clear decision rights.

O: Option value. Waiting, expansion, replication, refinancing, and exit can have value. A first project can improve a second, while shared infrastructure can support adjacent capacity. Options are strongest when milestones reveal information.

R: Residual risk. Remaining shareholder exposure should be stated as delay, lost energy, added capital, reduced revenue, liability, reputational harm, or loss of control. Paper allocation fails if the responsible party lacks capacity or enforcement is weak.

3.2 From dimensions to mode choice

RIGOR is a structured comparison, not a mechanical score. Weak early rights may repel a financial investor but create value for a developer. High complementarity supports partnership only when reserved matters, reporting, funding, and deadlock rules are credible.

Table 2. RIGOR entry mode selection framework

RIGOR condition	Build	Buy during construction	Partner
Rights completeness	Low at entry, but development pathway is controllable	Substantially formed and transferable	Mixed or program-level rights that partners can assemble jointly
Information reliability	Investor creates the evidence base	Existing evidence must be auditable and reconciled	Partners disclose and validate evidence through shared gates
Governance complementarity	External inputs can be contracted	Seller legacy can be separated from future control	Complementary capability is material and continuing
Option value	Value comes from design freedom and future replication	Value comes from saved time and visible progress	Value comes from staged scale, shared infrastructure, and expansion rights
Residual risk	Development delay and failure	Completion, interface, inherited compliance, and integration	Deadlock, diluted control, funding asymmetry, and partner performance
Preferred control mechanism	Internal development gates	Conditions precedent, warranties, remedies, and integration plan	Shareholders agreement, reserved matters, information rights, and staged funding

Build when development capability creates advantage. Buy when rights and evidence are mature and saved time exceeds integration cost. Partner when complementarity and optionality are high, but formalize governance before major commitment.

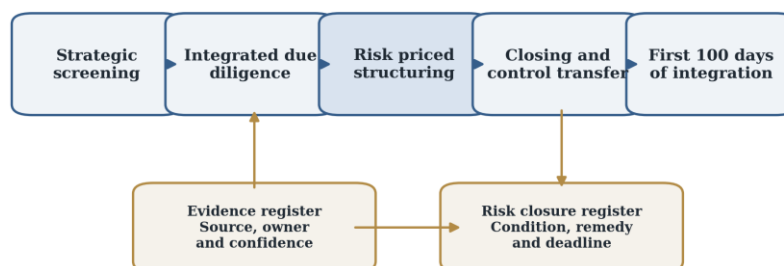
4. Integrated due diligence for construction-stage acquisition

4.1 Why conventional workstreams are insufficient

Specialist diligence can conceal risks between workstreams. A grid delay can alter sequencing, trigger claims, increase funding, and breach a financing condition. Every adviser may be locally correct while the decision remains incomplete.

The original 4L-8D model applies four lenses: **legality**, whether a right is valid; **loss pathway**, how a defect affects schedule, cash, energy, or liability; **liability allocation**, who bears an enforceable consequence; and **post-closing leadership**, who manages it after transfer.

Across eight domains, the output is one evidence map, red-flag register, adjusted base case, conditions schedule, and integration plan.



The acquisition thesis remains provisional until technical, legal, commercial, environmental and organizational evidence converges

Figure 1. Evidence based acquisition and integration cycle

Source: Developed by the author.

4.2 The evidence based acquisition cycle

The cycle starts by reconciling legal entity, ownership, name, coordinates, capacity, tariff record, grid point, and key contracts. This identity sheet prevents records from one asset being assigned to another, especially where transliteration and portfolio announcements create similar labels.

Next, every assumption is linked to a source, owner, validity, and verification status. Red flags are issues that can defeat the thesis, finance, closing, or selected mode. Findings are translated into schedule and cash effects, then allocated through correction, contract, insurance, conditions, contingency, or acceptance.

The cycle continues after closing. Document control, delegations, contractor instructions, permits, reporting, safety, stakeholder duties, and lender interfaces must transfer without stopping the works. Planning starts before approval. Operating evidence then improves future screening.

Table 3. Integrated acquisition due diligence model

Domain	Core evidence question	Principal loss pathway	Typical governance response
Corporate and control	Does the target own the represented project and can control lawfully transfer?	Invalid title, undisclosed obligation, or blocked control	Registry verification, authority matrix, conditions, and control-transition plan
Land and permits	Are site rights and approvals valid for the built design and full operating life?	Stop-work order, redesign, access loss, or remediation	Legal opinion, cadastral reconciliation, permit tracker, and renewal owner
Resource and energy yield	Are measurements, losses, wake effects, and availability assumptions independently supportable?	Revenue shortfall and covenant pressure	Independent engineer review, sensitivity cases, and performance monitoring
Grid and revenue	Are connection scope, commissioning duties,	Delayed energization, curtailment, or payment mismatch	Interface matrix, grid milestone plan, and downside case

	metering, dispatch, and settlement aligned?		
Engineering and construction	Do design, delivered equipment, work quality, schedule, and warranties form one executable system?	Cost overrun, delay, defect, or lost warranty	Site inspection, completion estimate, claims map, and integrated master schedule
Environment and stakeholders	Have impact, biodiversity, land-use, labour, safety, and grievance obligations been addressed?	Delay, liability, lender non-compliance, or loss of social acceptance	Gap assessment, corrective action plan, engagement owner, and monitoring
Finance, tax, and insurance	Do funding, security, tax, insurance, and cash waterfall remain workable after control changes?	Funding gap, uninsured loss, leakage, or default	Sources-and-uses reconciliation, consent map, coverage review, and liquidity reserve
Organization and integration	Can the buyer assume control without interrupting delivery or losing critical knowledge?	Decision paralysis, staff loss, claim prejudice, or reporting failure	Day-one controls, retention plan, delegation schedule, and 100-day integration

4.3 Risk ranking and decision rights

Risk ranking needs defined probability and impact. Impact covers schedule, capital, generation, enforceability, safety, environment, and financeability. Probability reflects event likelihood and evidence quality. A weakly documented low-probability issue is not equivalent to one supported by tested evidence.

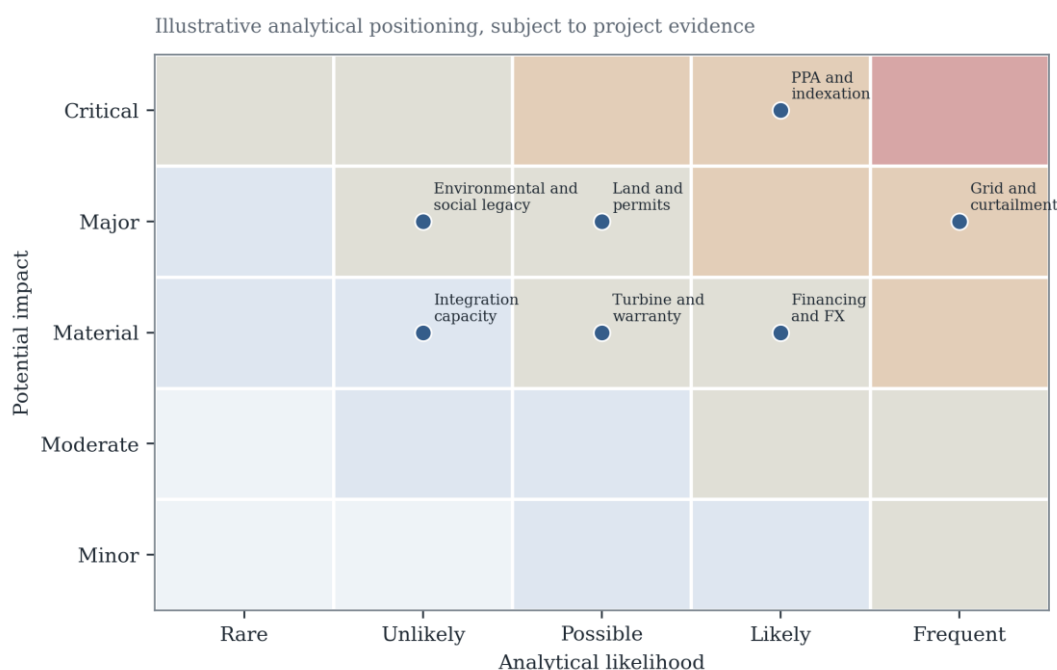


Figure 2. Analytical risk matrix for wind asset acquisition

Source: Developed by the author as a project specific assessment template.

The matrix names the owner before and after closing and the escalation gate. Issues may require correction, a condition, reserve, remedy, or post-closing action. Every accepted risk needs an operational owner.

5. Comparative case evidence

5.1 Zhanatas and Shokpar: build capability with partner continuity

Public facts. EBRD identifies Zhanatas as a 100 MW project owned by China Power International Holding and Visor, with multi-institution financing [18]. AIIB also documents the project [19]. The record supports classification as jointly owned greenfield development.

AIIB describes Shokpar as an adjacent 100 MW project co-developed by CPIH and Visor [20]. EBRD treats it as a separate project [21]. Adjacency supports learning and shared infrastructure, but not legal or environmental equivalence.

Public allegation. EBRD's accountability registry records a Shokpar complaint alleging threatened-bird collision risk and questioning environmental categorization [22]. This article makes no merits finding. The complaint shows why repetition still requires fresh site evidence and a grievance process.

Practitioner interpretation. Organizational learning transfers, but project consent remains local. Procurement knowledge, lender experience, and partner routines can repeat. Biodiversity conclusions, stakeholder maps, and land assumptions cannot. Shokpar required renewed assessment despite stronger complementarity and option value.

5.2 Dostyk: buying time while governing inherited interfaces

Public facts. Reporting attributed to China Export and Credit Insurance Corporation says CPIH acquired Dostyk, 50 MW, during construction. Medium and long-term export buyer's credit insurance reportedly covered 95 percent of both political and commercial risks. It supported RMB project finance from China Construction Bank Astana Branch, with about USD 45 million insured. The source called it Kazakhstan's first renewable project-finance case supported by this insurance form [23]. Public portfolio material also identifies Dostyk at 50 MW [24].

No inference is made here about the acquisition price, seller, transaction timing, loan amount, tenor, pricing, security package, or private allocation of liabilities. Those matters are outside the evidence set.

The structure can reduce lender exposure to covered political and commercial risks and widen RMB financing channels. It does not remove construction, resource, grid, environmental, or operating risk. Insurance neither repairs permits nor guarantees yield.

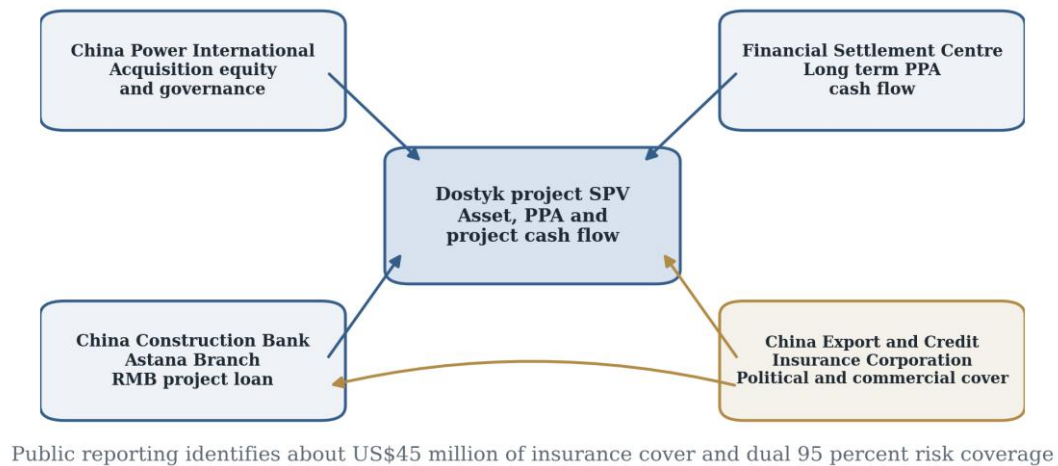


Figure 3. Publicly reported financing and risk allocation structure for the Dostyk project
Source: Compiled from public reporting by China Export and Credit Insurance Corporation.

Practitioner interpretation. Acquisition can save development time but place the buyer at the narrowest project stage. Design may be frozen, equipment delivered, claims forming, and the grid date dominant. The buyer has less freedom than a developer and less evidence than an operating-asset acquirer.

Diligence must therefore test interfaces: design consistency, warranty survival, contractor notices, testing duties, and the completion budget. Finance must fit that completion case. Dostyk shows how insurance and RMB finance can help when evidence and residual risk remain governable.

5.3 Arkalyk: identity before evaluation

The name Arkalyk appears in public sources in connection with two different wind assets. They should not be combined.

Public fact, Arkalyk-Kostanay. A regional-government record identifies the completed plant near Arkalyk city as a 48 MW asset with 10 turbines, names KazWindEnergy as investor, and reports commissioning in December 2023 [25]. KOREM's earlier 2022 auction record describes a 50 MW tendered project in Kostanay Region and names Aspan Energo LLP as the winner [26]. The difference between tendered and completed capacity, together with the named entities, means that any ownership or development sequence must be established through corporate, registry, contract, and coordinate evidence rather than inferred from the project name.

Public fact, Arkalyk-Akmola. AIIB's non-technical summary for the CPIH 220 MW Akmola portfolio describes Arkalyk Wind Power Plant LLP as a separate 15 MW subproject with three 5 MW turbines near Bulaksay and Saryoba, northeast of Astana [27]. It is distinct from the 48 MW plant near Arkalyk city.

Arkalyk-Akmola and Arkalyk-Kostanay are analytical labels, not asserted legal names. The distinction illustrates the first diligence rule: define the object before evaluating it.

Practitioner interpretation. Similar names can attach reports, permits, grid studies, or models to the wrong site. An identity certificate should reconcile entity, registration number, coordinates, region, capacity, grid point, auction record, and ownership before review.

AIIB's separate disclosure of five CPIH plants totaling 220 MW reinforces this need [27]. Portfolio capacity cannot replace an asset-level rights chain.

5.4 The announced 1 GW program: partnership as a governance platform

Public facts. In 2023, Samruk-Kazyna announced cooperation on a 1 GW wind and storage program and stated that the first 500 MW was planned in Zhambyl Region [28]. Official materials in 2026 described a 1 GW wind project in Pavlodar Region [29], while Samruk-Energy reported a construction launch near Ekibastuz with 300 MW of storage and expected investment of approximately USD 1.2 billion [30]. The reviewed documents do not establish legal continuity between every element of the 2023 and 2026 announcements.

Program records must therefore be read chronologically because location, scope, storage, and implementation can evolve. They show partnership direction and increasing development maturity, while each right and milestone still needs to be attached to a specific legal entity, site, and evidence date.

Practitioner interpretation. At 1 GW, partnership is a platform for sequencing land, grid, storage, procurement, industry, finance, and public coordination. Phasing preserves option value through gates, data rights, expansion options, funding calls, and exit rules.

Governance should separate program decisions from project-company control. Reserved matters can cover sites, standards, localization, portfolio finance, and expansion. Project boards control permits, budgets, contracts, construction, and operations. Information, deadlock, and funding-default rules must work within the schedule.

RIGOR indicates high complementarity and option value. Rights vary by site, so common data standards and project-level risk acceptance remain necessary.

6. Findings and propositions

6.1 Entry mode relocates uncertainty

The comparison supports six propositions.

Proposition 1. Greenfield development is preferred when project rights are incomplete but the investor has a superior capability to create, sequence, and document them. The investor accepts time risk to preserve design control.

Proposition 2. Construction-stage acquisition is preferred when rights are substantially formed, evidence is independently auditable, inherited interfaces are governable, and the value of saved time exceeds expected completion and integration costs.

Proposition 3. Joint development is preferred when local or institutional complementarity is material and continuing, and when staged governance can preserve option value without making accountability ambiguous.

Proposition 4. Construction-stage acquisition risk is non-linear. It can peak when physical commitment is high but commissioning evidence and operating cash flow are still absent. Percentage completion alone is therefore an inadequate maturity measure.

Proposition 5. Financing is a mediator between entry mode and performance. Insurance, lender participation, currency, and security can improve fundability, but only after project risks are identified and allocated. Finance does not substitute for evidence.

Proposition 6. Repeat-project learning improves organizational process more reliably than it reduces site-specific environmental and stakeholder risk. Each adjacent or replicated project requires a new local evidence baseline.

These propositions refine the usual build-or-buy choice. Partnership is not a compromise placed between two pure modes. It is a distinct governance technology. Acquisition is not simply a faster greenfield project. It is a transfer of an evolving network of rights and interfaces.

Greenfield development is not absence of legacy. Early choices become the legacy inherited by the operating team.

6.2 A gate-based decision process

The practical process has five gates. Gate 1 confirms project identity and strategic fit. Gate 2 applies RIGOR and compares feasible entry modes. Gate 3 verifies the evidence base and identifies fatal flaws. Gate 4 integrates risk into valuation, financing, contracts, and conditions. Gate 5 approves post-entry governance and assigns every accepted risk to an owner.

At each gate, the investor should retain the option to change mode. A proposed acquisition with unreliable evidence may become a staged partnership. A joint development with weak governance may become a contracted greenfield service arrangement. A greenfield pipeline with mature transferable rights may support a later sell-down or portfolio financing. Mode flexibility is valuable when it is designed in advance. Unplanned mode change usually signals that earlier uncertainty was misclassified.

7. Managerial and policy implications

For investors, the main implication is to select an entry mode and a governance system together. The investment paper should state why the proposed mode is superior to the two alternatives. It should also show which RIGOR dimensions drive that conclusion. A project that is financially attractive under one mode may be ungovernable under another.

For investment committees, evidence quality should be visible. Assumptions should be tagged as verified, independently assessed, management case, or unresolved. Public announcements should not be treated as project rights. Complaints should be recorded as allegations until assessed, but they should not be ignored merely because they are unproven. Practitioner judgment should explain a decision, not silently replace evidence.

For lenders and insurers, the integrated model provides a common bridge to sponsor diligence. A financing structure can allocate defined risks, but the asset must still reach completion and generate cash. Alignment is improved when the lender's conditions, insurer's coverage requirements, construction completion tests, and shareholder integration plan use the same evidence map.

For public partners, program-level cooperation benefits from transparent gates. Large announced capacity should be divided into developable units with clear land, grid, environmental, storage, procurement, and financing milestones. This allows public objectives and investor discipline to reinforce each other. It also makes changes in location or scope traceable rather than contradictory.

For regulators and market institutions, consistent project identifiers and accessible auction, grid, permitting, and ownership information can reduce diligence cost. Lower information friction attracts capital without weakening standards. Standardization is particularly valuable when several assets share similar names or when ownership changes during development.

International standards help define the environmental and social boundary. IFC Performance Standards address assessment, labour, communities, land, biodiversity, and cultural heritage [31]. EBRD policy adds lender-oriented appraisal, engagement, and monitoring [32]. OECD guidance treats due diligence as continuous identification, mitigation, tracking, communication, and remediation [33]. These standards do not replace Kazakhstan law, but they add a financeability lens.

8. Limitations and future research

This study has four limitations. First, it relies on public evidence. Public records are uneven across projects and may lag current status. Second, the case set is analytically selected and cannot establish statistical causality. Third, confidential transaction economics, internal negotiations, seller information, acquisition dates, and debt terms are deliberately excluded. The paper therefore evaluates governance logic rather than transaction returns. Fourth, practitioner interpretation can add process insight but may also introduce perspective bias. The explicit evidence labels reduce this risk but cannot eliminate it.

Future research could test the RIGOR dimensions across a larger sample of Kazakhstan renewable projects. Interviews with developers, lenders, insurers, regulators, and local stakeholders could examine whether the framework predicts mode changes and schedule outcomes. Quantitative work could model the option value of staged entry under auction, grid, and currency uncertainty. A longitudinal study could also compare how due diligence findings are converted into post-closing action and operating performance.

9. Conclusion

The choice to build, buy, or partner is a choice about the timing, ownership, and governability of uncertainty. Kazakhstan's wind market illustrates all three routes. Zhanatas and Shokpar show the value of repeated development capability and partner continuity, while also showing why site-specific diligence must be renewed. Dostyk shows the speed and finance potential of a construction-stage acquisition, together with the need to govern inherited completion interfaces. The two public Arkalyk records show that project identity is a substantive control. The announced 1 GW program shows why partnership at scale requires a phased governance platform.

The RIGOR framework connects rights completeness, information reliability, governance complementarity, option value, and residual risk to entry choice. The integrated acquisition model then links specialist diligence to loss pathways, liability allocation, and post-closing leadership. Together, they move the decision beyond a simple comparison of price and speed.

The practical conclusion is concise. Build when development capability creates control. Buy when evidence makes inherited time governable. Partner when complementarity and option value exceed the costs of shared control. In every mode, treat evidence as an operating asset. Capital can enter through a transaction. Sustainable value enters through governance.

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МАЗМҰНЫ – СОДЕРЖАНИЕ – CONTENT

ӘЛЕУМЕТТІК-ЭКОНОМИКАЛЫҚ ЖӘНЕ ҚҰҚЫҚ ҒЫЛЫМДАРЫ - СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ И ЮРИДИЧЕСКИЕ НАУКИ - SOCIO-ECONOMIC AND LEGAL SCIENCES

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**ДИНАМИКА ТУРИСТСКИХ ПОТОКОВ И ЭФФЕКТИВНОСТЬ ИНФРАСТРУКТУРЫ
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