

**ESG TRANSFORMATION OF TOURISM DESTINATIONS:  
METHODOLOGICAL INSIGHTS FROM CENTRAL ASIA****ABSTRACT**

Tourism destinations across Central Asia are growing at a pace their governance systems were never designed to absorb. This article asks a question that measurement studies usually leave open: once we know how sustainable a destination is, how do we actually transform it? Building on stratified field evidence from four Uzbek UNESCO World Heritage cities — 45 hotels, 247 surveyed tourists, and a three-round Delphi panel of 18 experts, gathered and first reported in the author's earlier studies — this article re-analyses that material for a new purpose: it builds a methodological model for the ESG transformation of tourism destinations. The model rests on four insights that the Central Asian evidence makes hard to ignore. First, transformation must begin with a baseline–target gap diagnosis at three levels, because the reserves for change differ sharply between the hotel, the destination, and the national system. Second, governance should move first: the observed dominance of the governance-to-environment pathway ( $DEC = 0.81$ ) suggests that rules and reporting precede, rather than follow, capital investment. Third, tourists respond to destination-level signals, not to any single hotel, so transformation must treat the destination — not the firm — as its unit. Fourth, the field data show ESG driving performance rather than constraining it. The article's contribution is a phased, feedback-driven transformation methodology, empirically grounded in Central Asian conditions and portable to comparable emerging tourism economies.

**Keywords:** ESG transformation, tourism destinations, multi-level methodology, governance-first sequencing, baseline–target gap, sustainable tourism, destination management, Delphi method, heritage cities.

**ANNOTATSIYA**

Markaziy Osiyo turizm hududlari boshqaruv tizimlari mo'ljallamagan sur'atda o'smoqda. Maqola o'lchov tadqiqotlari ko'pincha ochiq qoldiradigan savolni qo'yadi: destinatsiya qanchalik barqaror ekanini bilganimizdan so'ng, uni amalda qanday o'zgartiramiz? To'rtta o'zbek UNESCO meros shahridagi dala materialiga — 45 mehmonxona, 247 sayyoh so'rovi va 18 nafar ekspert ishtirokidagi uch bosqichli Delfi — tayanib (bu ma'lumotlar muallifning oldingi nashrlarida to'plangan va e'lon qilingan), muallif turizm destinatsiyalarini ESG asosida transformatsiya qilishning metodologik modelini ishlab chiqadi. Model to'rt tamoyilga asoslanadi: uch darajali diagnostika; boshqaruvni birinchi o'ringa qo'yish ( $G \rightarrow E$ ,  $DEC = 0,81$ ); destinatsiyani o'zgarish birligi sifatida olish; ESGni cheklov emas, samaradorlik omili deb qarash. Ishning yangiligi — o'lchovdan transformatsiyaga o'tuvchi, bosqichli va qayta aloqaga asoslangan metodologiya.

**Kalit so'zlar:** ESG transformatsiyasi, turizm destinatsiyalari, ko'p darajali metodologiya, boshqaruvni birinchi qo'yish, bazaviy–maqsad tafovuti, barqaror turizm, destinatsiya menejmenti, Delfi usuli, meros shaharlari.

**АННОТАЦИЯ**

Туристские регионы Центральной Азии растут быстрее, чем позволяют их системы управления. Статья ставит вопрос, который исследования обычно оставляют открытым: как на деле трансформировать дестинацию? На основе полевых данных из четырёх узбекских городов наследия ЮНЕСКО — 45 отелей, 247 туристов и трёхтурового Дельфи с 18 экспертами (собранных и впервые опубликованных в прежних работах автора) — автор разрабатывает методологическую модель ESG-трансформации туристских дестинаций.

Модель опирается на четыре принципа: трёхуровневая диагностика; приоритет управления ( $G \rightarrow E$ ,  $DEC = 0,81$ ); дестинация как единица изменений; ESG как драйвер, а не ограничение.

**Ключевые слова:** ESG-трансформация, туристские дестинации, многоуровневая методология, приоритет управления, устойчивый туризм, метод Дельфи, города наследия.

## 1. INTRODUCTION

Tourism is at once one of the most economically powerful industries on the planet and one of the least disciplined from a sustainability standpoint. The sector generates roughly 10 per cent of global GDP and a similar share of employment, yet it also accounts for close to 8 per cent of global carbon emissions and presses hard on the heritage, water, and biodiversity of the places that host it [10; 14]. The ESG framework — environmental, social, governance — arrived in tourism as a borrowed instrument, transplanted from corporate finance, and it has since become the common language for naming these pressures. Naming them, however, is not the same as changing them.

Central Asia sharpens the point. Uzbekistan, the region's most visited destination, saw international arrivals climb from 2.6 million in 2017 to 10.2 million in 2024, earning about USD 3.5 billion in tourism revenue [18]. Four UNESCO World Heritage cities along the Silk Road — Samarkand, Bukhara, Khiva, Shakhrisabz — give the country a cultural resource of the first order. What has not kept pace with the arrivals curve is the governance architecture needed to steer it: who measures the environmental footprint of this growth, who ensures its benefits reach residents, and through what institutions either task is actually carried out.

Here I want to draw a distinction that the literature often blurs. Measuring a destination's sustainability and transforming it are two different problems. A great deal of recent work — my own included — has built indicators, indices, and reporting templates. Fewer studies ask the harder, more practical question: given a baseline, in what order and by what means does a destination move toward its targets? That is the gap this article sets out to fill. My purpose is not to propose yet another indicator set, but to distil, from Central Asian field evidence, a methodology for ESG transformation — a repeatable way of getting a destination from where it is to where policy says it should be.

Why frame this as transformation at all? Because the word carries an obligation that measurement does not. A measurement tells a destination its temperature; a transformation methodology tells it what to do next, in what order, and with what it already has. Central Asian destinations are a demanding test case for such a methodology. They combine world-class heritage with thin institutional capacity, arid climates with fast-rising visitor numbers, and strong political will with fragmented coordination. If a transformation logic works here, under these constraints, it is likely to travel well to other emerging tourism economies that face a similar mix of ambition and limitation.

The scientific novelty of this article, situated within a DSc programme on forming a unified system of social, ecological, and governance factors in regional tourism, is a phased, evidence-based transformation methodology for tourism destinations in developing economies, built on four methodological principles and validated against baseline–target gaps measured in the field. The article follows the IMRAD structure.

## 2. LITERATURE REVIEW

Research on tourism sustainability measurement has moved through three overlapping phases. The first, launched by the UNWTO's destination indicators, argued that sustainability must be measured rather than assumed and offered a catalogue of destination-level metrics [9]. The second turned to enterprise reporting, asking individual hotels and operators to disclose against standardised ESG frameworks such as the GRI and SASB standards [7; 8]. The third, still taking shape, tries to knit these levels together into integrated, multi-level systems. Each phase advanced the measurement agenda; none, in my reading, resolved the transformation question.

Several recent studies from the Central Asian context bring the transformation problem into focus. Djaffarova and colleagues, in *Frontiers in Sustainability*, model how digital integration

across all three ESG dimensions shapes sustainable tourism in Bukhara; their PLS-SEM estimates return significant positive path coefficients for every dimension ( $\beta_E = 0.298$ ,  $\beta_S = 0.336$ ,  $\beta_G = 0.289$ ;  $p < 0.01$ ) and, tellingly, single out governance transparency as the highest-priority, lowest-performance dimension [1]. Makhmudova and Saidova survey 247 tourists and show that perceptions of cultural care and social responsibility, not hotel-level waste rates, drive destination trust and, through it, the intention to visit ( $\beta = 0.431$ ,  $p < 0.001$ ) [2]. Makhmudova and Baliyeva, combining bibliometric analysis with field data from 45 hotels, find that properties with higher ESG scores post 18.4 per cent higher guest satisfaction — a result that quietly upends the assumption that sustainability trades off against profit [3].

The theoretical anchor comes from Juraev and colleagues, whose Pentagonal Integral Model tracks Bukhara State University's fifteen-year GreenMetric trajectory and quantifies the coupling between sustainability subsystems through Dynamic Equilibrium Coefficients [4]. Three pathways stand out —  $E \rightarrow I$  (0.85),  $A \rightarrow S$  (0.83), and  $G \rightarrow E$  (0.81). The last of these matters most for my argument: because formal governance reliably precedes and predicts environmental investment, it offers an empirical reason to sequence transformation with governance first. Farmanov and colleagues extend the picture, showing that GIS-based transport optimisation in Bukhara can move all three ESG dimensions at once [5]. Read together, these works supply rich measurement and strong theory. What remains thin — and what I take up here — is a transferable methodology for turning that evidence into destination-level change.

It helps to name the theory beneath the governance-first claim. Institutional scholarship has long held that organizations adopt formal structures to secure legitimacy, and that they converge on shared practices under normative, mimetic, and coercive pressure [13]. Suchman's account of legitimacy management [19] makes the mechanism explicit: visible governance signals — reporting, disclosure, coordinating bodies — earn the social licence that later, costlier commitments depend on. In tourism this sequence is not merely plausible; the DEC evidence gives it a number. Transformation, on this reading, is as much an institutional process as a technical one, and a methodology that ignores the institutional order of operations will misfire even when its indicators are sound.

### 3. RESEARCH METHODOLOGY

I built the study around five complementary strands. A systematic review of more than forty international sources and standards — UNWTO, GRI, SASB, the UN SDGs, Eurostat, ISO — set the normative baseline. A stratified field programme then gathered primary data at both the enterprise and the destination level. Eighteen in-depth interviews and a three-round Delphi process let tourism specialists — academics, officials, and private-sector managers — rate each indicator for relevance, measurability, and target realism on a five-point scale. PLS-SEM estimated the paths between ESG dimensions and sustainability outcomes. Finally, international benchmarking placed every proposed target against UNWTO, OECD, Eurostat, and Uzbekistan-2030 reference points. I treated methodological transparency as non-negotiable: each indicator carries an explicit formula, a data source, and at least one international reference.

One point of provenance deserves emphasis. The field datasets used here — the 45-hotel audit, the 247-tourist survey, and the 18-expert Delphi panel — were collected and first reported in the author's earlier studies [2; 3]. This article does not present them as new primary data; it re-analyses them for a different question, moving from how sustainability is measured to how a destination is transformed. What is new is the methodology, not the underlying measurements.

The field sample covered 45 hotels across the four leading destinations — Bukhara (14), Samarkand (12), Tashkent (11), and Khiva (8) — which together account for roughly 76 per cent of the country's overnight stays [18]. I selected properties through the Tourism Committee's official register, using stratified purposive sampling to span five-star, three-to-four-star, boutique/heritage, and guesthouse types. The transformation logic that organises the analysis is deliberately simple: measure the gap, sequence the response, phase the implementation, and feed the results back into the next diagnosis. Section 4 develops this logic into a working model and tests it against the baseline data.

Two features of the design deserve emphasis. First, every target had to clear a realism test: the Delphi panel revised any value that experts judged unattainable within the horizon, which is why the 2030 figures read as stretch goals rather than fantasies. Second, I insisted on SMART discipline throughout — specific, measurable, achievable, relevant, time-bound — so that each indicator could anchor an actual management decision rather than a rhetorical one. Where field access allowed, I cross-checked self-reported hotel data against utility records and, in Bukhara, against the university's long GreenMetric series, which lends the enterprise-level baselines a degree of external validation uncommon in this literature.

#### 4. RESULTS AND DISCUSSION

Transformation, unlike measurement, is a sequence. A destination cannot improve every indicator at once, and it should not try. The model I propose runs as a four-stage cycle — diagnose, sequence, implement, monitor — that repeats as conditions change (Figure 1). Its logic is not linear but cumulative: each pass through the cycle narrows the gap between where a destination stands and where its 2030 targets sit.

*Micro (enterprise) → Meso (destination) → Macro (national)*

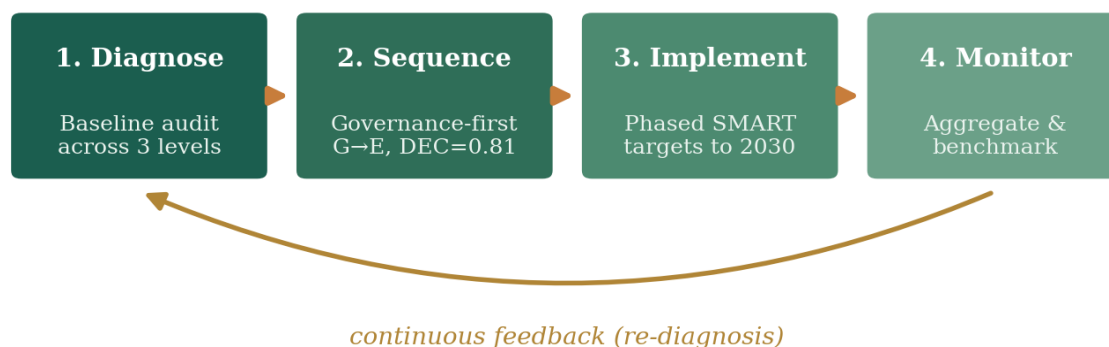


Figure 1. The four-stage ESG transformation cycle for tourism destinations.

Source: developed by the author.

Four principles hold the model together, and each rests on Central Asian evidence rather than assertion (Table 1). The first is multi-level integration: what a hotel does becomes what a destination is, which in turn becomes what the nation reports. The second is destination-level externalities — tourists judge Bukhara, not a particular guesthouse in it. The third is governance priority, the practical translation of the G→E coefficient of 0.81: put the rules, the reporting, and the coordinating body in place before demanding costly environmental upgrades. The fourth is economic co-benefit: the 18.4 per cent satisfaction premium found in the field data reframes ESG spending as an investment, not a levy.

**Table 1. Four methodological principles of ESG transformation and their evidential basis**

| Principle                              | Evidential basis                                             | Transformation implication                                        |
|----------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------|
| <b>Multi-level integration</b>         | PIM/DEC cascade across subsystems [4]                        | Diagnose and act at micro, meso, and macro levels together        |
| <b>Destination-level externalities</b> | Cultural care → trust → visit intention, $\beta = 0.431$ [2] | Treat the destination, not the single firm, as the unit of change |
| <b>Governance priority</b>             | G→E pathway, DEC = 0.81 [4]                                  | Sequence governance reforms before capital-intensive upgrades     |
| <b>Economic co-benefit</b>             | +18.4% guest satisfaction at higher-ESG hotels [3]           | Frame ESG as a driver of competitiveness, not a cost              |

Source: compiled by the author from field results and cited studies [2,3,7].

Diagnosis is where transformation either gains traction or loses it, because a target without a measured baseline is a slogan. Our 2024–2025 audit produced baseline values at every level, and the gaps they reveal are uneven in a way that carries strategic meaning (Table 2). At the enterprise level, the renewable-energy share sat at just 11.4 per cent against a 2030 target of 40 per cent, while the local-staff share — already 53.2 per cent — needed only a modest push. The largest single social deficit appeared not inside hotels but at the destination level: the gender-equality index for regional tourism stood near 0.47 against a target of 0.90, and community stakeholder participation reached a striking low of 8.6 per cent against a 30 per cent benchmark. At the national level, the ESG tourism-strategy score of 42 out of 100 marks the system-wide reserves; at the destination level, a carbon intensity of about 148 kg CO<sub>2</sub> per tourist against a target of 80 (Table 2) shows how wide the environmental gap still runs.

**Table 2. Selected baseline–target gaps by level (Uzbekistan, 2024–2025 field and statistical data)**

| Indicator (level)                  | Baseline | 2030 target | Reserve   | Priority |
|------------------------------------|----------|-------------|-----------|----------|
| Renewable energy share (micro)     | 11.4%    | ≥ 40%       | wide      | High     |
| Waste recycling rate (micro)       | 17.6%    | ≥ 50%       | wide      | Medium   |
| Local staff share (micro)          | 53.2%    | ≥ 60%       | narrow    | Medium   |
| Gender equality index (meso)       | ~0.47    | ≥ 0.90      | very wide | High     |
| Community participation (meso)     | 8.6%     | ≥ 30%       | very wide | High     |
| Regional carbon intensity (meso)   | ~148 kg  | ≤ 80 kg     | wide      | High     |
| ESG tourism strategy score (macro) | 42/100   | ≥ 70/100    | wide      | High     |

Source: author's 2024–2025 field audit (45 hotels) and national statistics [18].

Two lessons follow from the shape of these gaps. The narrow reserves — local staffing, for instance — offer quick, credibility-building wins. The very wide ones — community participation, gender balance — are structural, and they will not close through hotel-level effort alone; they demand destination governance. This is precisely why a transformation methodology has to be selective about order, and it points directly to the next insight.

If I had to compress this article into a single practical claim, it would be this: govern before you invest. The empirical warrant sits in the G→E coefficient of 0.81 reported for the Pentagonal Integral Model [4] — a strong signal that formal governance adoption tends to precede, and predict, environmental investment rather than the other way round. The Delphi panel reinforced the point from a different angle, ranking governance transparency as the dimension where Central Asian destinations lag most and gain fastest. So the roadmap does not open with solar panels. It opens with reporting requirements, a destination coordination body, and open ESG data — the low-cost scaffolding on which the expensive environmental upgrades later stand.

The final methodological insight concerns pace. Destinations in emerging economies rarely have the institutional capacity to do everything at once, and a roadmap that ignores this simply stalls. I therefore phase the transformation across three horizons, each with a defined focus and a realistic set of actions (Table 3). The first phase builds governance and closes the quick social gaps; the second tackles the capital-intensive environmental reserves; the third consolidates, benchmarks, and feeds results back into a fresh diagnosis — closing the loop drawn in Figure 1.

**Table 3. Phased ESG transformation roadmap for Central Asian tourism destinations**

| Phase                 | Horizon   | Priority focus                   | Key actions                                                                                |
|-----------------------|-----------|----------------------------------|--------------------------------------------------------------------------------------------|
| <b>I. Foundation</b>  | 2026–2027 | Governance and quick social wins | ESG reporting rules; destination coordination body; open data portal; local-hiring targets |
| <b>II. Investment</b> | 2028–2029 | Environmental reserves           | Renewable energy and water-efficiency upgrades; waste systems; low-carbon mobility         |

|                           |      |                           |                                                                                  |
|---------------------------|------|---------------------------|----------------------------------------------------------------------------------|
| <b>III. Consolidation</b> | 2030 | Benchmarking and feedback | National ESG index; international benchmarking; re-diagnosis and target revision |
|---------------------------|------|---------------------------|----------------------------------------------------------------------------------|

Source: developed by the author; sequencing informed by the  $G \rightarrow E$  pathway [4].

I do not present this roadmap as a finished blueprint. Its value is procedural: it shows how a destination can convert a diagnosis into an ordered set of moves, rather than a wish list. Bukhara, with the deepest longitudinal data in the sample, is the natural place to pilot it — and what is learned there should transfer, with local calibration, to Samarkand, Khiva, and comparable heritage destinations across the region.

How far does an Uzbek-grounded method travel? The region's destinations differ in scale but rhyme in structure, and Table 4 maps the fit. Kazakhstan brings larger markets and stronger fiscal capacity; the Kyrgyz Republic and Tajikistan bring mountain and community-based tourism with lighter institutions; all four share the governance and data gaps that make the sequencing rule relevant. The transformation cycle is, by design, indifferent to a destination's starting point — it prescribes an order of moves, not a fixed set of values — which is exactly what makes it portable. What must be recalibrated locally are the baselines and the weights, not the logic.

**Table 4. Fit of the transformation methodology across selected Central Asian contexts**

| Country / focus                       | Distinctive condition                        | Methodological adjustment                        |
|---------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>Uzbekistan (heritage cities)</b>   | Dense UNESCO heritage; rapid arrivals growth | Full cycle; heritage-weighted social indicators  |
| <b>Kazakhstan (urban/business)</b>    | Larger market; stronger fiscal capacity      | Faster Phase II; emphasis on carbon and mobility |
| <b>Kyrgyz Republic (mountain/CBT)</b> | Community-based tourism; light institutions  | Heavier governance scaffolding in Phase I        |
| <b>Tajikistan (nature/eco)</b>        | Fragile ecosystems; nascent data systems     | Prioritise baseline data-building before targets |

Source: developed by the author.

## 5. CONCLUSIONS

This article set out to move the ESG conversation in tourism from measurement to transformation. Working from Central Asian field evidence — 45 hotels, 247 tourists, an expert Delphi panel — I have argued that transforming a destination is a sequenced, multi-level task rather than a checklist, and I have distilled that task into a four-stage cycle governed by four principles. The diagnosis showed where the reserves lie: modest at the hotel gate, very wide at the destination level, where community participation and gender balance lag furthest behind. The sequencing rule — govern first, invest second — rests on the observed strength of the governance-to-environment pathway. And the phased roadmap turns all of this into something a policymaker can actually schedule.

There is a broader claim worth stating plainly. For a decade, the field has treated better measurement as the route to better tourism, and measurement has indeed improved. Yet destinations do not become sustainable because someone counts their emissions more precisely; they become sustainable when institutions act, in sequence, on what the counting reveals. The methodology offered here is my attempt to take that step seriously — to put the order of action, not the accuracy of the indicator, at the centre of the sustainability project.

Two contributions stand out. Methodologically, the article offers a transferable transformation cycle for emerging tourism economies, grounded in measured baselines rather than aspiration. Practically, it gives destination managers and national authorities an ordered agenda, one that spends scarce capacity where it returns the most. The main limitation is scope: the field evidence is Uzbek, and while Central Asian destinations share heritage, climate, and institutional features, cross-country validation remains to be done. Future research should test the cycle in Kazakhstan, the Kyrgyz Republic, and Tajikistan, refine the destination-level social indicators that this study flags as the weakest link, and track whether governance-first sequencing delivers the

environmental gains the DEC evidence predicts. Transformation, in the end, is not won by measuring more, but by acting in the right order.

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