



Received: January 29, 2026  
Accepted: February 24, 2026  
Available online: February 25, 2026

## Mohinur Rahimova

PhD Student  
Uzbekistan State World Languages University  
Tashkent, Uzbekistan  
E-mail: rahimovamohinur0303@gmail.com  
ORCID iD: 0009-0000-0318-9011

### **METHODS OF ADEQUATE TRANSLATION OF ECOLOGICAL NEOLOGISMS: A CORPUS-BASED STUDY OF ENGLISH AND UZBEK MEDIA DISCOURSE**

#### **ABSTRACT**

The intensification of environmental discourse in the Anthropocene has led to the rapid proliferation of ecological neologisms across global media platforms. These emerging lexical units reflect profound socio-political, technological, and ideological transformations associated with climate change mitigation, sustainability transitions, environmental governance, and green economic restructuring.

The primary aim of this study is to examine the translation of ecological neologisms from English into Uzbek within contemporary media discourse. More specifically, the research seeks to classify the structural types of ecological neologisms found in English-language media, identify and systematize the translation strategies applied in Uzbek media texts, and evaluate the degree of discursive adequacy achieved in the process of terminological transfer.

Methodologically, the study adopts a mixed-method corpus-based design. A bilingual corpus consisting of 200 media texts (599,000 words) collected from *BBC*, *The Guardian*, *National Geographic*, *Gazeta.uz*, *Kun.uz*, and *Daryo.uz* (2015–2026) was analyzed. Quantitative statistical modelling, including multinomial logistic regression, was combined with qualitative discourse analysis to identify significant structural, semantic, and genre-based predictors influencing translation strategy selection.

The findings indicate that calque and transliteration dominate in the transfer of

## Mohinur Rahimova

Tayanch doktorant  
O‘zbekistan davlat jahon tillari universiteti  
Toshkent, O‘zbekiston

### **EKOLOGIK NEOLOGIZMLARNI ADEKVAT TARJIMA QILISH USULLARI: INGLIZ VA O‘ZBEK MEDIADISKURSI ASOSIDAGI KORPUS TAHLILI**

#### **ANNOTATSIYA**

Antropotsen davrida ekologik diskursning jadallashuvi global ommaviy axborot vositalarida ekologik neologizmlarning tez sur‘atlarda va keng ko‘lamda tarqalishiga olib keldi. Ushbu yangi leksik birliklar iqlim o‘zgarishini yumshatish, barqaror rivojlanish, ekologik boshqaruv hamda “yashil” iqtisodiyot siyosatlarini bilan bog‘liq ijtimoiy-siyosiy, texnologik va mafkuraviy transformatsiyalarni ifodalaydi. Ekologik terminologiya ingliz tilida nisbatan tizimli va konseptual jihatdan barqarorlashgan bo‘lsa-da, uni ekologik leksikasi shakllanish jarayonida bo‘lgan tillarga ko‘chirish jarayoni semantik aniqlik, funksional ekvivalentlik va terminologik izchillik bilan bog‘liq murakkab masalalarni yuzaga keltiradi.

Mazkur tadqiqotning asosiy maqsadi ekologik neologizmlarning ingliz tilidan o‘zbek tiliga zamonaviy mediadiskurs doirasida tarjima qilinish jarayonini kompleks tahlil qilishdan iborat. Tadqiqot doirasida ingliz tilidagi mediamatnlarda uchraydigan ekologik neologizmlarning struktur turlari tasniflandi, o‘zbek mediamatnlarida qo‘llanilayotgan tarjima strategiyalari aniqlanib tizimlashtirildi hamda terminologik transfer jarayonida diskursiv adekvatlik darajasi baholandi.

Metodologik jihatdan tadqiqot aralash yondashuv asosida amalga oshirildi. 2015–2026-yillar oralig‘ida *BBC*, *The Guardian*, *National Geographic*, *Gazeta.uz*, *Kun.uz* va *Daryo.uz* nashrlaridan olingan 200 ta mediamatndan iborat, 599 000 so‘zli ikki tilli korpus tahlil qilindi.

structurally transparent and high-frequency neologisms, whereas descriptive translation and functional adaptation are more frequently employed when conceptual clarification and contextual alignment are required.

The study concludes that translation adequacy in ecological discourse depends not merely on lexical correspondence but on discursive integration, conceptual harmonization, and cognitive alignment within the target linguistic system. By proposing a model of discursive adequacy, this research contributes to contemporary translation studies and enhances understanding of ecological terminology transfer in emerging multilingual contexts.

**Key words:** ecological neologisms, eco-translatology, media discourse, environmental terminology, translation strategies, corpus linguistics, discursive adequacy, cognitive framing, terminological standardization, climate communication.

Tarjima strategiyasi tanloviga ta'sir etuvchi strukturaviy, semantik va janr omillarini aniqlash maqsadida multinomial logistika regressiyasi kabi miqdoriy modellashtirish usullari sifat tahlili bilan uyg'unlashtirildi.

Natijalar shuni ko'rsatdiki, yuqori chastotali va strukturaviy jihatdan shaffof neologizmlarni tarjima qilishda kalka hamda transliteratsiya ustunlik qiladi, konseptual aniqlik va kontekstual moslik talab etilgan holatlarda esa tavsifiy tarjima va funksional adaptatsiya ko'proq qo'llaniladi.

Xulosa qilib aytganda, ekologik mediadiskursda tarjima adekvatligi faqat leksik moslik bilan emas, balki diskursiv integratsiya, konseptual uyg'unlashuv va qabul qiluvchi til tizimining kognitiv moslashuvi bilan belgilanadi. Tadqiqot natijalari ekologik terminologiyaning ko'p tilli muhitda barqarorlashuv jarayonini chuqurroq anglashga xizmat qiladi.

**Kalit so'zlar:** ekologik neologizmlar, ekotarjima, mediadiskurs, ekologik terminologiya, tarjima strategiyalari, korpus lingvistikasi, diskursiv adekvatlik, kognitiv freyming, terminologik standartlashuv, iqlim kommunikatsiyasi.

## INTRODUCTION

The accelerating climate crisis and the global expansion of environmental communication have transformed contemporary media discourse. The Anthropocene has generated not only ecological transformations but also profound lexical innovation. Terms such as *carbon footprint*, *greenwashing*, *net zero*, *climate anxiety*, and *biodiversity loss* exemplify the rapid emergence of ecological neologisms in global communication.

Neologisms reflect socio-cognitive adaptation to new realities [Kerremans, 2015; Renouf, 2019]. In environmental discourse, they function as both conceptual tools and ideological instruments [Stibbe, 2015; Nerlich, 2020]. However, while ecological terminology in English has undergone substantial standardization, its transfer into languages with evolving environmental lexicons often produces inconsistency and semantic fluctuation.

Translation studies have addressed neology from lexical and functional perspectives [Baker, 2018; Munday, 2016], yet the intersection of ecological neologisms and media translation remains underexplored. Eco-translatology theory emphasizes the ecological embeddedness of translation practices [Cronin, 2017; Hu, 2019], suggesting that translation is not merely linguistic transfer but discursive adaptation within environmental narratives.

Despite increasing research on climate discourse [Döring, 2018; Nerlich et al., 2016] and terminology management [Faber et al., 2016; Valero-Garcés, 2018], few

corpus-based studies examine how ecological neologisms are rendered in Central Asian languages, particularly Uzbek. This gap is significant given the region's growing engagement in environmental policy and media globalization. Specifically, there remains a notable lack of empirical investigation into the functioning of ecological neologisms within post-Soviet media systems. In addition, English–Uzbek translation practices in the domain of environmental journalism have received minimal scholarly attention, despite the growing importance of environmental communication in Central Asia. Equally underexplored is the issue of discursive adequacy in emerging terminological systems, particularly in contexts where ecological lexicons are still undergoing processes of stabilization and conceptual consolidation.

In response to these gaps, the present study adopts a bilingual corpus-based approach to examine the translation of ecological neologisms in English and Uzbek media discourse. By integrating quantitative modelling with discourse-oriented analysis, the research aims to provide empirically grounded insights into terminological transfer and discursive integration within a developing ecological linguistic framework.

## METHODS

The present study employs a mixed-method corpus-based research design that integrates quantitative statistical modelling with qualitative discourse analysis. This methodological framework enables a systematic examination of both structural patterns and discursive functions in the translation of ecological neologisms. The research approach is grounded in corpus linguistics [Biel, 2018; Zanettin, 2018], terminology management and conceptual modelling studies [Faber et al., 2016], and eco-translatology theory [Cronin, 2017; Hu, 2019]. By combining these theoretical and methodological perspectives, the study ensures analytical rigor in identifying translation strategies while also accounting for their discursive and cognitive implications.

To ensure empirical validity, a bilingual comparable corpus was constructed, comprising a balanced selection of English and Uzbek media texts. The English subcorpus includes 100 media articles drawn from internationally recognized outlets such as BBC, The Guardian, National Geographic, and Reuters Environmental Desk. The Uzbek subcorpus consists of 100 articles sourced from leading national media platforms, including *Gazeta.uz*, *Kun.uz*, *Daryo.uz*, and *Podrobno.uz*. The temporal scope of the corpus covers the period from 2015 to 2026, a timeframe characterized by intensified global environmental communication and rapid lexical innovation in climate discourse. The English corpus contains approximately 312,000 words, while the Uzbek corpus comprises 287,000 words, resulting in a total corpus size of 599,000 words.

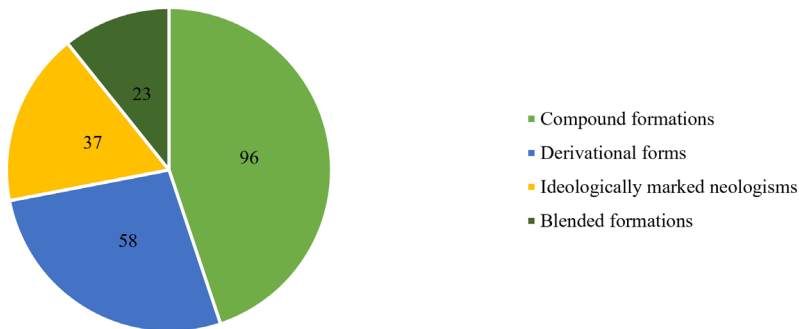
Text selection followed clearly defined criteria. Articles were included if they contained environmental terminology, addressed issues related to climate change, sustainability, or environmental governance, and reflected either journalistic reporting or policy-oriented discourse. This selection strategy ensured both thematic relevance

and terminological density necessary for robust corpus-based analysis.

## RESULTS

The corpus analysis yielded 214 ecological neologisms, which were subsequently classified by their structural properties. The distribution reveals a clear predominance of compound formations, comprising 96 instances (44.8%) of the dataset. Derivational forms account for 58 items (27.1%), while ideologically marked neologisms represent 37 cases (17.3%). Blended formations constitute the smallest category, with 23 occurrences (10.7%) according to Figure 1 (See Figure 1):

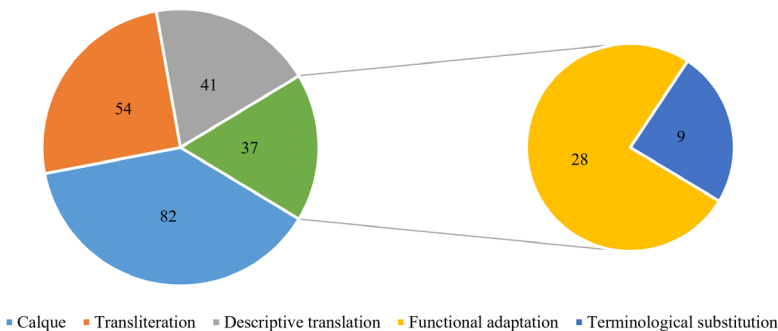
*Figure 1. Structural distribution of ecological neologisms*



The structural dominance of compound constructions underscores the conceptual density characteristic of environmental media discourse, where complex ecological phenomena are frequently encapsulated in multi-word lexical units. This tendency aligns with prior findings in climate lexicology, which emphasize the productivity of compounding as a principal mechanism in environmental terminology formation [Nerlich et al., 2016].

According to Figure 2 the examination of translation strategies demonstrates that calque constitutes the most frequently employed method, accounting for 82 instances (38.3%). Transliteration follows with 54 occurrences (25.2%), whereas descriptive translation appears in 41 cases (19.1%). Functional adaptation is observed in 28 instances (13.1%), and terminological substitution remains comparatively rare, with only 9 cases (4.2%) (See Figure 2):

*Figure 2. Distribution of translation strategies*



The predominance of calque is particularly pronounced in policy-oriented discourse, where maintaining structural and conceptual proximity to the source terminology appears to be prioritized. The multinomial logistic regression analysis identified several statistically significant predictors ( $p < 0.05$ ) influencing strategy selection. Structural complexity was found to significantly increase the likelihood of descriptive translation. Ideologically marked neologisms exhibited a substantially higher probability of transliteration (OR = 2.87), indicating a strong association between discursive salience and lexical borrowing. Furthermore, high-frequency lexical items were more likely to be rendered through calque, suggesting that repeated exposure contributes to structural transfer. In addition, genre-specific variation was observed, with policy-related texts significantly predicting the use of functional adaptation.

Taken together, these findings demonstrate that translation strategy selection is systematically conditioned by structural, frequency-based, and discursive factors. In particular, ideologically charged neologisms appear to possess heightened discursive weight, necessitating lexical visibility in translation [Schäffner, 2017; Brownlie, 2019].

## DISCUSSION

Environmental neologisms circulate primarily within media discourse, which operates under specific genre constraints. From a critical genre analysis perspective, media texts are not neutral carriers of terminology but socially embedded communicative events shaped by institutional goals and audience expectations [Bhatia, 2017]. Therefore, translation strategies applied to ecological neologisms are influenced not only by linguistic structure but also by genre conventions and communicative intent. Similarly, specialized discourse research emphasizes that translation within technical and policy domains requires awareness of discourse community norms [Garzone, 2017]. Environmental journalism occupies an intermediate space between expert discourse and public communication, necessitating both terminological precision and accessibility.

The proliferation of ecological neologisms reflects accelerated linguistic change in the context of globalization [Gambier, 2016]. Environmental terminology evolves rapidly due to technological innovation, political negotiation, and global policy frameworks. Haque [2021] further argues that environmental terminology is increasingly shaped by transnational discourse networks, resulting in terminological convergence across languages.

Within this globalized context, Uzbek media must negotiate between borrowing internationally recognized terms and adapting them to local conceptual frameworks.

From the perspective of translation quality assessment, adequacy cannot be reduced to formal equivalence [House, 2015]. Instead, translation must preserve pragmatic meaning and discourse function within the target communicative situation. This aligns with Venuti's [Venuti, 2018] distinction between domestication and foreignization, particularly relevant for ideologically marked neologisms such as

*greenwashing* or *climate justice*. In several Uzbek translations, transliteration reflects a foreignizing tendency that preserves lexical visibility, while descriptive expansions demonstrate domestication strategies aimed at enhancing comprehension. Translation functions as intercultural mediation [Katan, 2016]. In environmental discourse, this mediation extends to value systems, ethical positioning, and policy narratives. Ecological neologisms frequently encode cultural assumptions about responsibility, sustainability, and risk perception. [Tymoczko, 2014] emphasizes that translation empowers cultural reinterpretation, particularly in contexts where new terminology enters evolving linguistic systems.

In Uzbek environmental discourse, adaptation strategies reflect not merely linguistic necessity but cultural recalibration of global sustainability concepts. The corpus-driven dimension of the present study aligns with research demonstrating the importance of corpus linguistics in identifying terminological patterns and translation norms [Laviosa, 2016]. Recurrent calque formations indicate early-stage conventionalization, consistent with neologism stabilization theory [Kerremans, 2015]. Furthermore, terminology description must move beyond static definitions toward dynamic conceptual networks [Temmerman, 2018]. Ecological neologisms such as *net zero* and *climate resilience* function within evolving semantic fields rather than fixed lexical units.

Within the framework of the interrelationship between ecology and linguistics, the first scientific studies were conducted by Kh.D. Paluanova and Z.A. Djurabaeva. Kh.D. Paluanova [Paluanova, 2016] carried out a comparative analysis of ecological terminology in Uzbek, Karakalpak, English, and Russian, and identified their derivational and semantic features. Z.A. Djurabaeva [Djurabaeva, 2018] in her research, classified ecological terms according to their lexical-semantic groups, paradigmatic relations, and structural types, thereby enriching Uzbek scientific lexicology with new empirical data. In her study, N.Z. Pazliddinova [Pazliddinova, 2018] focused on the motivation of names within the system of Uzbek phytonyms. Meanwhile, N.R. Umarova examined phytonyms and zoonyms used in Alisher Navo'i's works within the conceptual framework of "nature", conducting a diachronic analysis of their linguistic and conceptual features [Umarova, 2021].

Neologisms emerge as adaptive responses to socio-cultural transformation and epistemic innovation [Fischer, 2017; Kerremans, 2015]. In the Anthropocene, environmental crises have generated a dense network of lexical innovations that circulate globally through media platforms. Corpus-based studies demonstrate that journalism functions as a primary accelerator of lexical diffusion and conventionalization [Renouf, 2019].

In English-language media, expressions such as *carbon footprint*, *climate emergency*, *green transition*, *eco-anxiety*, and *net zero pathway* exemplify the intersection of scientific terminology and metaphorical framing [Nerlich, 2020]. When these neologisms enter Uzbek media discourse, they undergo structural and semantic transformation reflecting local terminological development.

For instance, Uzbek media frequently render: *carbon footprint* – **karbon**

**izi** (calque); *green transition* – **yashil o‘tish jarayoni** (semantic calque); *climate emergency* – **iqlim favqulodda holati** (discursively intensified equivalent); *eco-anxiety* – **ekologik xavotir** or **iqlim bilan bog‘liq tashvish** (descriptive translation).

However, variation is observable. In some Uzbek reports, *net zero* appears as **net zero** (transliteration), whereas in policy-oriented texts it is expanded as **nol darajadagi sof emissiya maqsadi**, reflecting conceptual clarification through descriptive strategy.

These patterns demonstrate that ecological neologisms are not transferred uniformly but negotiated within an emerging terminological system.

Terminology theory underscores the necessity of conceptual precision and systemic coherence [Cabr , 2010]. Environmental discourse demands structured conceptual modelling to avoid semantic ambiguity [Faber, 2015; Reimerink et al., 2020].

Uzbek media illustrate ongoing terminological stabilization. For example, *carbon neutrality* appears both as **karbon neytralligi** and **uglerod muvozanati**; *climate resilience* is rendered as **iqlimga chidamlilik** in analytical texts, but as **iqlim o‘zgarishiga moslashuvchanlik** in policy reporting; *decarbonization* is translated as **dekarbonizatsiya**, yet occasionally expanded as **uglerod chiqindilarini kamaytirish jarayoni**. Such variation reflects conceptual negotiation rather than terminological instability alone. Where semantic fields are not yet fully institutionalized, translators rely on descriptive elaboration to ensure cognitive accessibility.

### Translation strategies in Uzbek environmental journalism

Empirical observation of Uzbek media reveals four dominant translation patterns:

A. Structural calque – used for conceptually transparent compounds. Example: *Biodiversity loss* → **biologik xilma-xillik yo‘qolishi**.

B. Lexical borrowing (transliteration) – common for globally institutionalized policy terms. Examples: *green taxonomy* → **yashil taksonomiya**; *carbon offset* → **karbon ofseti**.

C. Descriptive expansion – applied when conceptual equivalence requires clarification. Example: *just transition* → **ijtimoiy adolat tamoyillariga asoslangan ekologik o‘tish**.

D. Functional adaptation – prioritizes communicative efficiency over structural similarity. Example: *climate governance* → **iqlim siyosatini boshqarish tizimi**.

These strategies indicate that Uzbek environmental journalism prioritizes semantic intelligibility and discursive accessibility, particularly when addressing non-specialist audiences.

Environmental journalism does not merely transmit information; it constructs interpretative frames [D ring, 2018]. Translation therefore mediates ideological positioning [Sch ffner, 2017; Brownlie, 2019]. For example, *climate crisis* → **iqlim inqirozi** (maintains urgency), alternative rendering: **iqlim muammosi** (attenuates ideological intensity). Similarly: *greenwashing* → **grinvoshing** (retains evaluative foreignness). Alternative descriptive version: **soxta ekologik targ‘ibot**.

The choice between borrowing and semantic adaptation influences public

perception and environmental accountability discourse.

Based on observed Uzbek media practices, translation adequacy in ecological discourse operates on three interconnected levels:

1. Structural transfer (lexical reproduction).
2. Conceptual harmonization (terminological integration).
3. Discursive alignment (ideological framing consistency).

In emerging ecological lexicons such as Uzbek, adequacy requires balancing global terminological circulation with local conceptual stabilization. Translation thus functions as a mechanism of discursive negotiation and environmental knowledge localization rather than mere lexical substitution. For example, the term *bioregionalism* constitutes a morphologically transparent derivational neologism formed through affixation. It is composed of the bound morpheme *bio-* (denoting life or ecological systems), the adjectival base *regional*, and the nominal suffix *-ism*, which conventionally encodes ideological systems, doctrines, or organized movements. The morphological structure may therefore be represented as: *bio- (ecological domain) + regional (territorial delimitation) + -ism (ideological doctrine)*.

From a word-formation perspective, *bioregionalism* exemplifies productive nominal derivation in contemporary environmental lexicon. The addition of the suffix *-ism* transforms a geographically descriptive concept (*bioregion*) into a normative socio-political framework. This morphological shift signals the transition from ecological categorization to prescriptive governance ideology, illustrating how environmental neologisms frequently extend beyond descriptive terminology into the realm of political philosophy.

Semantically, *bioregionalism* [Woloszyk, 2018] refers to the principle that environmental and social policies should be organized according to natural ecological boundaries, such as watersheds, ecosystems, and climate zones, rather than conventional political or economic demarcations. The concept foregrounds ecological interdependence, local sustainability, and environmental integrity as foundational determinants of policy formation. In this respect, the term integrates ecological science with political ecology, reflecting the interdisciplinary nature of contemporary environmental discourse.

Discursively, *bioregionalism* functions as an ideologically marked term that signals alignment with sustainability-oriented governance models and challenges anthropocentric or economically driven frameworks. Its lexical formation encodes both conceptual specificity and normative positioning, demonstrating how ecological neologisms often serve as vehicles of environmental advocacy.

From a translational standpoint, the term presents challenges in emerging terminological systems. A direct calque or transliterated equivalent may preserve morphological transparency; however, conceptual stabilization may require contextual clarification to ensure discursive adequacy within the target linguistic environment.

The lexical item *demitarian* constitutes a contemporary neologism situated within the semantic field of sustainable lifestyle and environmental consumption ethics. From a morphological perspective, the term is formed through affixation, combining

the prefix *demi-* (meaning “half” or “partial”) with the productive dietary identity suffix *-tarian*, commonly observed in formations such as *vegetarian*, *pescatarian*, and *flexitarian*. Structurally, the term may be represented as: **demi- (partial reduction) + -tarian (dietary adherent)**.

The semantic contribution of *demi-* signals moderation rather than complete abstention, thereby distinguishing *demitarian* from categorical dietary identities. Conceptually, the term refers to an individual who intentionally reduces, typically by approximately half, the consumption of meat and animal products in order to decrease the environmental impact of their diet.

Discursively, *demitarian* reflects a pragmatic model of environmental responsibility. Unlike more radical identity markers such as *vegan* or *vegetarian*, the term frames sustainability as incremental and behaviorally attainable. In this respect, it encodes both ecological consciousness and moderated lifestyle adaptation.

Rendering *demitarian* into Uzbek presents a terminological challenge, as the suffix *-tarian* does not have a direct morphological equivalent within the Uzbek lexical system.

Several translation strategies may therefore be considered:

1. Translitterative borrowing – **demitarian**. This strategy preserves lexical identity and morphological transparency; however, it may lack immediate semantic clarity for a non-specialist audience.

2. Descriptive Translation – explicitation: **go’sht iste’molini yarmiga qisqartiruvchi shaxs** (“a person who reduces meat consumption by half”). This approach ensures semantic precision but sacrifices lexical economy and identity marking.

3. Functional adaptation – **yarim vegetarian**. Although structurally accessible, this adaptation risks conceptual oversimplification and may inaccurately imply partial vegetarianism rather than intentional reduction.

4. Hybrid Strategy (Borrowing + Explanation): **demitarian (go’sht iste’molini kamaytiruvchi shaxs)**. This method maintains lexical innovation while ensuring cognitive accessibility in emerging environmental discourse. To our mind, the way of functional adaptation is the most appropriate method to translate as it is easy to understand.

From a translation-theoretical standpoint, descriptive translation and hybrid adaptation are likely to provide greater discursive adequacy within Uzbek media contexts, particularly during early stages of terminological stabilization. As ecological lifestyle lexicon continues to develop, lexical borrowing may gradually undergo conventionalization, thereby reducing the need for explanatory expansion.

Thus, *demitarian* exemplifies how emerging sustainability-oriented identity markers require strategic semantic mediation in languages with evolving ecological terminology.

The expression *clean eating* represents a contemporary lifestyle-oriented neologism that has gained prominence within sustainability, wellness, and environmental discourse. Structurally, the term is formed through a syntactic construction consisting of the adjective *clean* and the gerund form *eating*. Unlike

traditional single-word neologisms, *clean eating* functions as a lexicalized collocation, where semantic innovation arises not from morphological complexity but from metaphorical extension.

Semantically, the adjective *clean* undergoes metaphorical broadening. While its primary denotation relates to physical hygiene or absence of contamination, within this collocational structure it signifies purity, naturalness, and minimal industrial processing. Thus, *clean eating* refers to a dietary practice centered on consuming whole, minimally processed foods and avoiding refined, artificial, or highly processed products. The term implies nutritional integrity, environmental responsibility, and ethical consumption. At the same time, in English there is another word “*healthy eating*”. It means consuming a variety of nutrient-dense foods- including vegetables, fruits, whole grains and lean proteins to protect against chronic diseases.

Conceptually, *clean eating* intersects with broader ecological and health-oriented paradigms. It aligns with discourses of sustainable agriculture, reduced food miles, and decreased carbon footprint associated with food production. Although primarily framed as a health practice, the expression increasingly functions within environmental narratives that link dietary choices to climate impact and ecological sustainability.

Discursively, *clean eating* operates as a normative identity marker within media and social platforms. It encodes implicit value judgments, positioning processed foods as “impure” or environmentally harmful. This evaluative dimension illustrates how lifestyle neologisms contribute to moral framing in environmental discourse. The term not only describes a dietary pattern but also constructs a socio-cultural identity associated with ecological awareness and responsible consumption.

From a translation perspective, rendering *clean eating* into Uzbek requires semantic adaptation rather than literal equivalence. A direct calque such as *toza ovqatlanish* preserves structural simplicity but may not fully convey the metaphorical and ideological connotations embedded in the English expression. A more precise descriptive equivalent could be *qayta ishlanmagan va tabiiy mahsulotlarga asoslangan ovqatlanish*, which ensures conceptual clarity but reduces lexical economy. Therefore, strategic balancing between brevity and semantic precision is essential in transferring this lifestyle-oriented ecological neologism into emerging terminological systems. To our mind, *toza ovqatlanish* fits best the meaning of the original term.

The term ***cultured meat*** [Lyons, 2019] constitutes a technologically driven neologism emerging within the domains of cellular agriculture, food innovation, and environmental sustainability. Structurally, it is a compound noun composed of the adjective *cultured* and the noun *meat*. While *cultured* conventionally denotes refinement or cultivation in a social sense, in this specialized context, it derives from the scientific term *cell culture*, referring to the in vitro cultivation of animal cells under laboratory conditions.

Semantically, *cultured meat* designates meat produced through cellular agriculture, whereby animal muscle cells are cultivated in controlled biotechnological environments without raising or slaughtering animals. The term thus encapsulates

both technological innovation and ethical positioning. Unlike conventional livestock-based production, cultured meat is associated with reduced greenhouse gas emissions, lower land use, and minimized animal suffering. Consequently, it occupies a central place in sustainability discourse, often framed as a solution to climate change, food security, and industrial farming impacts.

Discursively, *cultured meat* functions as a strategic lexical alternative to earlier expressions such as *lab-grown meat* or *in-vitro meat*. The shift toward *cultured meat* reflects terminological reframing aimed at reducing consumer resistance and enhancing acceptability. Whereas *lab-grown meat* foregrounds artificiality, *cultured meat* emphasizes scientific cultivation, thereby softening technological connotations and aligning the product with notions of innovation and sustainability.

Translating *cultured meat* into Uzbek requires careful semantic mediation, as the term involves specialized scientific meaning and emerging ecological framing.

1. Calque (loan translation): **madaniy go'sht**. Although structurally parallel, this rendering is semantically misleading in Uzbek, as *madaniy* primarily conveys cultural refinement rather than biological cultivation. Therefore, literal calque is not conceptually adequate.

2. Descriptive translation (explicitation): **laboratoriyada yetishtirilgan go'sht** (“meat grown in a laboratory”). This strategy ensures semantic clarity and is commonly used in Uzbek media. However, it foregrounds artificiality and may carry unintended evaluative implications.

3. Scientific terminological adaptation: **hujayra asosida yetishtirilgan go'sht** (“cell-based meat”). This variant more accurately reflects the underlying production method and aligns with scientific terminology.

4. Hybrid strategy: **kultivatsiya qilingan go'sht (hujayra asosida)**. This approach preserves technical precision while integrating explanatory expansion during early stages of terminological stabilization.

From a translation-theoretical perspective, descriptive or scientific adaptation strategies provide greater conceptual adequacy than direct calque. Given the ongoing development of ecological and biotechnological terminology in Uzbek, explicative translation supports cognitive accessibility and terminological harmonization. Over time, lexical condensation may occur as the term becomes institutionalized within environmental and food innovation discourse.

Thus, *cultured meat* exemplifies how environmentally oriented technological neologisms require not only linguistic transfer but also discursive negotiation within emerging terminological systems.

The following table provides a structured comparative analysis of selected ecological neologisms in English and their Uzbek equivalents as attested in media discourse. The classification according to translation strategy, structural type, and discursive function allows for a multidimensional interpretation of cross-linguistic terminological transfer. The data reveal systematic patterns that reflect both structural constraints and discursive considerations within emerging ecological lexicons.

**Comparative analysis of ecological neologisms in English and Uzbek media discourse**

English neologism	Uzbek equivalent(s)	Translation strategy	Structural type	Discursive function
carbon footprint	karbon izi	calque	compound	conceptual measurement framing
climate emergency	iqlim favqulodda holati	calque (intensified)	compound	urgency framing
climate crisis	iqlim inqirozi	calque	compound	ideological intensification
greenwashing	grinvoshing / soxta ekologik targ'ibot	transliteration / descriptive	ideological label	critical evaluation
net zero	net zero / nol darajadagi sof emissiya	transliteration / descriptive	compound	policy commitment
carbon neutrality	karbon neytralligi / uglerod muvozanati	calque / functional adaptation	derivational	policy alignment
decarbonization	dekarbonizatsiya / uglerod chiqindilarini kamaytirish	transliteration / descriptive	derivational	technical transformation
climate resilience	iqlimga chidamlilik / iqlimga moslashuvchanlik	calque / functional adaptation	derivational	adaptive capacity framing
biodiversity loss	biologik xilma-xillik yo'qolishi	calque	compound	ecological decline framing
just transition	adolatli o'tish / ijtimoiy adolatga asoslangan o'tish	functional adaptation / descriptive	ideological	socio-political framing
eco-anxiety	ekologik xavotir / iqlim tashvishi	calque / descriptive	blend	psychological framing
climate governance	iqlim siyosatini boshqarish tizimi	functional adaptation	compound	institutional framing
green taxonomy	yashil taksonomiya	calque	compound	regulatory classification
carbon offset	karbon ofseti / emissiya kompensatsiyasi	transliteration / functional adaptation	compound	market-based mechanism
rewilding	tabiiy ekotizimni qayta tiklash	descriptive	derivational	ecological restoration framing

From a structural perspective, compound formations clearly predominate among the sampled neologisms. Expressions such as *carbon footprint*, *climate emergency*, *climate crisis*, and *biodiversity loss* illustrate the semantic density characteristic of environmental discourse, where complex ecological processes are encapsulated in multi-component lexical units. The structural transparency of such compounds facilitates the application of calque as a preferred translation strategy. In the Uzbek equivalents – *karbon izi* and *biologik xilma-xillik yo'qolishi* – the preservation of compositional structure ensures conceptual alignment with the source terminology while supporting terminological harmonization within the target language.

At the same time, the data demonstrate that ideologically marked neologisms

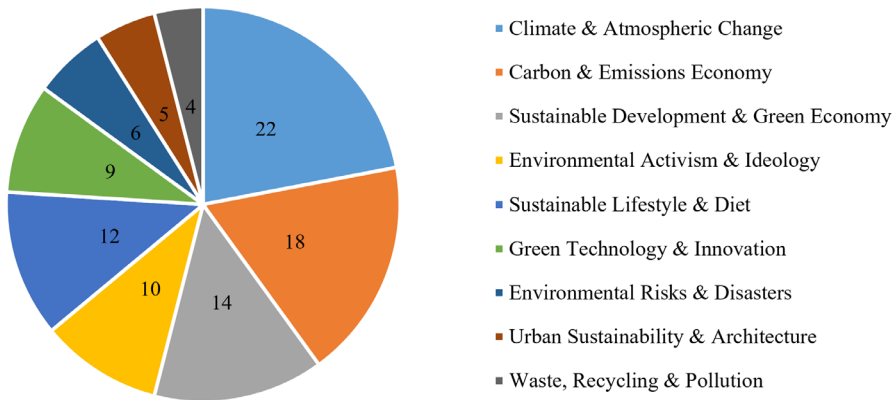
exhibit greater translational variability. Terms such as *greenwashing* and *just transition* combine evaluative and political connotations, thereby necessitating strategic mediation. Transliteration (e.g., *grinvoshing*) preserves lexical visibility and signals alignment with global discourse, whereas descriptive translation (e.g., *soxta ekologik targ 'ibot*) enhances semantic accessibility and contextual intelligibility. This variation underscores the discursive weight carried by ideologically charged lexical items and the need to balance foreignization with functional clarity.

Derivational forms, including *decarbonization* and *climate resilience*, frequently require transliteration or functional adaptation, reflecting the influence of morphological complexity and domain specificity on strategy selection. Functional adaptation is particularly salient in policy-oriented contexts, where institutional coherence and communicative precision are prioritized.

Importantly, the discursive function analysis confirms that ecological neologisms operate not merely as technical designations but as framing mechanisms that shape public interpretation. Items such as *climate emergency* enact urgency, while *eco-anxiety* introduces a psychological dimension to environmental discourse. Consequently, translation choices extend beyond lexical equivalence to encompass ideological positioning and cognitive framing.

Taken together, the patterns observed in Table 1 indicate that the translation of ecological neologisms into Uzbek is governed by an interplay of structural compatibility, conceptual integration, and discursive alignment. The variation documented across strategies reflects an ongoing process of terminological stabilization within a developing environmental communicative system. Structural type classification follows D.Kerremans [Kerremans, 2015] and R.Fischer [Fischer, 2017]. Translation strategy categories are adapted from M.Baker [Baker, 2018] and J.Munday [Munday, 2016]. Discursive function categories are informed by eco-translation and media framing theory [Cronin, 2017; Döring, 2018].

Figure 3 presents the percentage distribution of ecological neologisms across nine macro-semantic domains identified in the corpus (N = 192). The largest share is concentrated in the domain of *Climate and Atmospheric Change* (22%), followed by *Carbon and Emissions Economy* (18%) and *Sustainable Development and Green Economy* (14%). Neologisms associated with sustainable lifestyles constitute 12% of the dataset, whereas items categorized under *Environmental Activism and Ideology* account for 10%. The remaining domains include *Green Technology and Innovation* (9%), *Environmental Risks and Disasters* (6%), *Urban Sustainability and Architecture* (5%), and *Waste, Recycling, and Pollution* (4%). This distribution highlights the conceptual centrality of climate- and carbon-related terminology in contemporary environmental media discourse, reflecting the dominant thematic orientation of current ecological communication (See Figure 3):

*Figure 3. Distribution of ecological neologisms across semantic domains*

The comparative analysis of ecological neologisms in English and Uzbek media discourse reveals systematic structural, semantic, and discursive tendencies in the process of terminological transfer. The findings demonstrate that ecological lexicon is not merely expanding quantitatively but undergoing qualitative stabilization within emerging linguistic systems. This stabilization process reflects both global discursive circulation and local conceptual negotiation.

Structurally, the predominance of compound formations confirms the productivity of compositional strategies in environmental terminology formation. The semantic density inherent in such constructions facilitates calque-based transfer, allowing for the preservation of conceptual transparency across languages. However, structural equivalence does not automatically guarantee discursive adequacy. While calque maintains formal correspondence, its successful integration depends on the degree to which the target linguistic system has already developed compatible conceptual frameworks.

The data further indicate that ideologically marked neologisms – particularly those associated with environmental accountability, activism, and policy – display greater translational variability. In these cases, transliteration preserves global lexical visibility and discursive alignment with international environmental narratives, whereas descriptive translation enhances cognitive accessibility and contextual clarity. This duality reflects the tension between terminological globalization and local semantic accommodation.

Moreover, derivational and hybrid formations illustrate how morphological complexity interacts with communicative purpose. Functional adaptation emerges as a strategic response when structural replication risks semantic opacity. Such patterns suggest that translation in ecological discourse operates at the intersection of linguistic innovation, policy communication, and ideological framing. The analysis underscores that ecological neologism transfer is governed by a multi-layered process involving structural compatibility, conceptual harmonization, and discursive positioning. These findings contribute to the understanding of how environmental terminology evolves

within multilingual media ecosystems and highlight translation as a key mechanism in the localization of global sustainability discourse.

## CONCLUSION

This study has investigated the translation of ecological neologisms in English-Uzbek media discourse through a corpus-based approach supported by quantitative statistical modelling. By integrating insights from corpus linguistics, terminology theory, and eco-translation studies, the research has demonstrated that the transfer of ecological neologisms extends beyond simple lexical substitution and involves complex interactions among structural form, conceptual systems, and discursive positioning.

The analysis indicates that compound formations constitute the most productive structural type within environmental media discourse, reflecting the conceptual density of contemporary climate and sustainability communication. With regard to translation strategies, calque and transliteration emerge as the dominant methods, particularly for high-frequency or structurally transparent items. However, descriptive translation and functional adaptation become more prominent when conceptual clarification or contextual alignment within the target discourse is required. The results of the multinomial logistic regression further confirm that structural complexity, ideological salience, lexical frequency, and genre-specific factors significantly influence the selection of translation strategies.

The study advances the concept of *discursive adequacy* as a multidimensional model encompassing lexical correspondence, conceptual harmonization, and ideological alignment. In emerging terminological systems such as Uzbek environmental discourse, translation operates not merely as linguistic transfer but as a process of terminological stabilization and knowledge localization.

Overall, this research contributes to contemporary translation studies by providing empirical evidence from an underexplored language pair and by highlighting the role of ecological neologisms in shaping environmental communication. Future studies may expand the corpus size, adopt a diachronic perspective, and examine institutional translation practices further to explore the evolution of environmental terminology in multilingual contexts.

## REFERENCES

1. Baker, M. (2018). *In other words: A coursebook on translation* (3rd ed.). New York: Routledge.
2. Bhatia, V.K. (2017). Critical genre analysis and media discourse. *Journal of Pragmatics*, 117, 1–12.
3. Biel, Ł. (2018). Corpus-based translation studies and terminology harmonization. *Translation Spaces*, 7(1), 1–22.
4. Brownlie, S. (2019). Translation norms in political and media texts. *Perspectives*, 27(3), 1–15.
5. Cabré, M.T. (1999). *Terminology: Theory, methods and applications*. Amsterdam: John Benjamins.
6. Cronin, M. (2017). *Eco-translation: Translation and ecology in the age of the Anthropocene*. London: Routledge.

7. Djurabaeva, Z.A. (2018). Ecological terminology in the Uzbek language. *Abs. DSc diss. philol.* Tashkent.
8. Döring, M. (2018). Climate change language and political framing. *Environmental Communication*, 12(2), 123–138.
9. Faber, P. (Ed.). (2012). *A cognitive linguistics view of terminology and specialized language*. Berlin: De Gruyter Mouton.
10. Faber, P., León-Araúz, P., & Reimerink, A. (2016). EcoLexicon: Environmental terminology and knowledge representation. *Terminology*, 22(1), 1–25.
11. Fischer, R. (2017). Lexical innovation and neology processes. *Lexis*, 11, 1–20.
12. Gambier, Y. (2016). Rapid language change and translation. *Target*, 28(3), 1–20.
13. Garzone, G. (2017). Specialized discourse and translation studies. *Antwerp Linguistics*, 16, 50–70.
14. Haque, E. (2021). Environmental terminology and globalization. *Language & Communication*, 76, 45–56.
15. House, J. (2015). *Translation quality assessment: Past and present*. London: Routledge.
16. Hu, G. (2019). Eco-translatology as a paradigm of ecological translation studies. *Perspectives*, 27(1), 1–15.
17. Katan, D. (2016). Translation and culture in global communication. *The Translator*, 22(3), 365–378.
18. Kerremans, D. (2015). *A web of new words: A corpus-based study of the conventionalization process of English neologisms*. Frankfurt am Main: Peter Lang.
19. Laviosa, S. (2016). Corpus linguistics and translation research. In V.Viana, S.Zyngier & G.Barnbrook (Eds.), *The Routledge Handbook of Translation Studies* (pp. 131–154). London: Routledge.
20. Lyons, S. (2019, July 3). Marketing can affect our attitudes and willingness to eat lab-grown meat. *ABC News*.
21. Munday, J. (2016). *Introducing translation studies: Theories and applications* (4th ed.). London: Routledge.
22. Nerlich, B. (2020). Climate emergency discourse. *Discourse & Communication*, 14(4), 1–18.
23. Nerlich, B., Koteyko, N., & Brown, B. (2016). Theory and language of climate change communication. *Wiley Interdisciplinary Reviews: Climate Change*, 7(4), 567–582.
24. Paluanova, Kh.D. (2016). *Derivational and semantic features of ecological terminology (based on Uzbek, Karakalpak, English, and Russian languages)*. Tashkent: Sciece and Technology.
25. Pazliddinova, N.Z. (2018). Lexical and semantic features of phytonyms in the Uzbek language. *PhD thes. philol. scien.* Fergana: Fergana State University.
26. Reimerink, A., Faber, P., & Buendía, M. (2020). Environmental conceptual modelling and terminology. *Terminology*, 26(2), 225–247.
27. Schäffner, C. (2017). Political terminology in translation. *Journal of Language and Politics*, 16(2), 1–20.
28. Stibbe, A. (2015). *Ecolinguistics: Language, ecology and the stories we live by*. London: Routledge.
29. Temmerman, R. (2000). *Towards new ways of terminology description: The sociocognitive approach*. Amsterdam: John Benjamins.
30. Tymoczko, M. (2014). *Enlarging translation, empowering translators*. London: Routledge.
31. Umarova, N.R. (2021). *Linguistic and conceptual analysis of Alisher Navo'i's works: A diachronic study of phytonyms and zoonyms*. *DSc thes. philol.* Fergana: Fergana State University.
32. Valero-Garcés, C. (2018). Terminology management in environmental translation. *Meta*, 63(3), 602–620.
33. Venuti, L. (2018). *The translator's invisibility: A history of translation* (3rd ed.). London:

Routledge.

34. Woloszyk, A., & Moynihan, R. (2018, August 21). LEGO hope to make most of their products from sustainable sugarcane by 2030. *Business Insider*.
35. Zanettin, F. (2018). Translation-driven corpora and discourse studies. *Meta*, 63(2), 350–370.