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КУРСОВА РОБОТА

З ПЕРЕКЛАДУ

СПОСОБИ ВІДТВОРЕННЯ ФАХОВОЇ ТЕРМІНОЛОГІЇ В ГАЛУЗІ ОХОРОНИ НАВКОЛИШНЬОГО СЕРЕДОВИЩА З АНГЛІЙСЬКОЇ МОВИ НА УКРАЇНСЬКУ

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CONTENTS

INTRODUCTION

This term paper is focused on ways of rendering professional terminology in the field of environmental protection from English into Ukrainian on the base of mass media texts. Mass media coverage of environmental issues dates back to 1930s, however big amounts of articles on pressing matters in the field of environmental protection started to emerge close to 1980s. Mass media representation of this field was studied by A. Anderson, J. Metag, S. C. Moser, M. S. Schäfer and I. Schlichting and other researchers. Meanwhile, professional terminology in the field of environmental protection was studied by M. Salamaha in her various works, M. Teplova, D. Oltarzhevskyi, O. Ivashchyshyn and others.

Topicality for the study consists in rising interest to the current problems, connected to the environment and ways of solving them, which are usually being covered by print and electronic mass media, plenty of articles and newscasts. These problems are reported to readers and viewers with the help of various terms from the field of environmental protection.

Object of the research is professional terminology in the field of environmental protection.

Investigation subject is ways of reproducing professional terminology in the given field.

Aim of the research is to analyze terminology in the field of environmental protection and establish ways of translation of this terminology in mass media discourse.

This aim involves achieving the following objectives of the research:

- to describe characteristics, pertinent to all terms;
- to study lexico-semantic processes in terminology in the field of environmental protection;
- to establish general rules of translation of terminology;
- to describe main features of mass media discourse;
- to find out ways of translation of terminology in the given filed from English into Ukrainian on the base of mass media texts.

This term paper is based on data sources of Ukrainian and foreign researchers.

In order to meet all the goals of the research, we resorted to the following methods:

- deductive method was applied in order to differentiate terms in the field of environmental protection from other terms;
- descriptive method was used in order to portray peculiar features of terms in the aforementioned field;
- analytical method was utilized in order to establish ways of reproducing terms from English into Ukrainian;
- theoretical analysis of data sources for the given theme.

Theoretical value of the research consists in ability to use given information for further studies of terminology in the field of environmental protection and ways of its reproduction from English into Ukrainian.

Practical value of the research consists in ability to use suggested ways of translation of this terminology for rendering not only in mass media discourse, but also in other types of discourse.

This term paper consists of two chapters, conclusions, bibliography, list of references, list of data sources, annex and resume.

Introduction provides general theoretical provisions, topicality of the theme, main aim and objectives, theoretical and practical value of the research as well as methods, utilized in the course of research.

Chapter 1 "Professional terminology as a language phenomenon and a translation challenge" focuses on notion of terminology as a discipline, main features of terms as lexical units, classification of terms in the field of environmental protection, description of ways of rendering terms as well as analysis of the text, taken from mass media discourse.

Chapter 2 "Professional terminology in the field of environmental protection in mass media discourse" is dedicated to analysis of transformations, implied in the translation process of terms in the field of environmental protection on

the base of news articles and statistics in the form of diagrams.

Conclusion summarizes research findings and mentions the most significant theoretical and practical results.

CHAPTER 1
PROFESSIONAL TERMINOLOGY AS A LANGUAGE PHENOMENON AND A TRANSLATION CHALLENGE

1. Professional terminology as a language phenomenon

Science and language are often walking side by side, as inventions and scientific discoveries should obtain a name for themselves. Thus, scientists, in particular chemists, botanists and zoologists were the first people who were interested in naming of scientific concepts. The desire to create universal set of rules for formulating terms dated back to the 19th century [15: 1]. Clear and well-established system of terms would allow professionals in the field together with those who do not have special knowledge to operate the concepts and describe further developments or researches as well as communicate their findings to the world and get feedback from colleagues regardless of their place of living and language they speak. With the help of aforementioned system there would be no deficits or excesses in the terms, on the contrary they would be universal. Therefore, there was a need for terminology as a discipline. The Austrian Eugen Wüster, the Latvian Ernst Drezen and the Russian Dmitrij Lotte are considered the founders of terminology as a discipline. These three engineers were concerned about the problems in professional communication that may arise because of terminological deficits, so they sought standardization. All of the three founders had some basic approaches to terminology, they are as follows:

- The concept is a unit of knowledge;
- Knowledge ordering;
- Term formation regulated by guidelines;
- Dynamic standardization of concepts and terms [21: 9-10].

There are different views on the place of terminology in a language: majority of scientists believe that it is a subsystem of literary language, while some researchers consider terminology to be a separate kind of language like jargon or dialects. The history of formation of scientific style leads to a conclusion that literary language is a

base for terminology, as any system of terms is a part of vocabulary composition of literary language [10].

According to approach of Wüster and others, concept is a unit of knowledge that can model and explore the world. Meanwhile, terms are lexical units that help to denote concepts [3: 25]. Although, it is quite challenging to give clear definition of the word "term", as this word may be interpreted in many ways and there are a lot of generic concepts by which researchers define the term: a verbal complex, a special object, a special concept, a language sign etc., we can present the following definition of the word "term" and use it in this paper. Term – a word or phrase that denotes a certain concept in a particular field of human activity e.g. science, technology, culture, sports, art, etc. [14: 143].

Speaking of peculiar characteristics of terms, they are as follows [12: 34-37]:

1. **Unambiguity.** Terms, by their linguistic nature are unambiguous lexical units [20: 81], i.e. they have only one meaning.
2. **Accuracy.** Terms should fully and precisely convey the meaning of a concept, although the definition of a term may vary depending on the field it is used in (for example, term *regression* in statistics and medicine).
3. **Consistency.** Terms are systematic and standardized, they belong to a certain system in a field and they are coined according to regulatory guidelines. Each term has a designated place in the system.
4. **Stylistic neutrality.** Terms do not evoke any feelings and do not provoke reader to some actions, they just report information without any emotional connotations.
5. **Clear definition.** Definition delineates and limits meaning of the term.
6. **Absence of synonyms or homonyms** (in one system of terms). Synonymy and homonymy make scientific communication more difficult, however there are some exceptions (for example, in Ukrainian there are two synonyms for the word "environment" – *навколишнє середовище; довкілля*).
7. **Laconism.** Each term has short indicative or descriptive characteristics.

8. **Motivation.** Term is considered motivated if user can derive its meaning from analysis of its components.
9. **Derivability.** It refers to the ability to create other terms from the term's stem.

Terms, as well as lexis in general, possess such lexico-semantic processes as polysemy, homonymy, (partially) synonymy, antonymy and in terminology they are realized in a specific way.

Terms are characterized by polysemy, and interdisciplinary polysemy in particular, i.e. meaning of one word in one field is used in another field to define particular phenomenon (for example, *resistance* in physics and biology) [10]. Although, there are some instances when one term possesses various meanings in one and the same field. For example, term "atmosphere" in ecology field. Original meaning of the word: "air surrounding the Earth", however this word obtained another meaning "a unit of pressure". This is a prominent example of terminological homonymy [8: 56].

Synonymy is expressed quite specifically in terminology, as terms that are considered synonyms define one concept or object. Thus, terminology allows existence of absolute synonyms. There are a few reasons for this lexico-semantic process to exist in terminology. They are existence of full and abbreviated versions, existence of verbal and symbolic expressions of concepts, usage of obsolete and modern term, etc. [10].

Speaking of antonyms, terms define correlative notions, that belong to one range of events or phenomena. Terms-antonyms may be created with the help of prefixes where root remains the same (this feature is exceptionally pertinent to Ukrainian language). As for English language terms-antonyms are completely different words, that have no common morphological part in their structure. There are also pairs of antonyms where opposition is present in the first part of the word whereas the second part remains the same (for example, *micromolecule – macromolecule*) [10].

If to look closely at the object of our study, that is professional terminology in the field of environmental protection, it is widely used not only in specialized literature like scientific journals or manuals but also in different spheres of our life. As people are getting concerned with environmental protection, especially nowadays, they start

to get interested in this topic, so they search for materials to study. There can be found a lot of articles on this matter on the Internet, so it can be inferred that professional terminology in the field of environmental protection is proliferating and leaving the limits of solely scientific literature.

As it was mentioned before, literary language serves as a basis for creating terms. Thus, common words may evolve into terms by obtaining new semantic characteristics. There are 4 types of terms formation on the basis of common words [11: 49].

1. First type – terms that express categorical notions of environmental protection. General phenomena and everyday objects form the base for creation of terms. These terms are considered basic: *air – повітря, water – вода, soil – ґрунт, pollution – забруднення, protection – захист,* etc.
2. Second type – terms are formed on the basis of polysemic word where terms differentiate their meaning with the help of new semantic characteristics. For example, *greenhouse effect – парниковий ефект, cooling pond – охолоджувальний ставок*, etc.
3. Third type – terms of this type are also formed on the basis of polysemic words, however their terminological meaning evolved on the basis of transition, i.e. term drifts apart from original meaning. For example, *transparency – прозорість, impermeability – непроникність,* etc.
4. Fourth type – monosemic words constitute a part of terminological collocations. For example, *air cleaning – очищення повітря, storage container – посудина для зберігання*, etc.

Terminological collocations are abundant in terminology in the field of environmental protection and the most productive model of term formation is using two (or more) nouns [12: 9]. Terms in the aforementioned field are mostly nouns, this can be explained with the fact these terms are used to denote phenomena or processes happening in the environment. Adjectives take the second place, while verbs – the third one.

According to classification of M. Salamaha, terms in the field of environmental

protection may be divided into 11 thematical groups:

1. Names of actions and processes: *desertification – опустелювання, radiation – радіація,* etc.
2. Names of factors that influence the environment: *human activity – людська діяльність, tsunami – цунамі, carbon dioxide – вуглекислий газ, toxic waste – токсичні відходи,* etc.
3. Names of measures, methods and ways of protection, purification and maintenance of environment in appropriate condition: *filtration – фільтрація, air conditioning – кондиціонування повітря, recycling – переробка, reforestation – відновлення лісів,* etc.
4. Names of buildings, instruments, devices for protection, purification, prevention of problems and maintenance of environment in appropriate condition: *dust collector – пилозбирач, national park – національний парк, sanitizer – дезінфекційний засіб,* etc.
5. Names of objects that require protection and maintenance in appropriate condition: *environment – навколишнє середовище, endangered species – види, які перебувають під загрозою зникнення,* etc.
6. Names of results and consequences of the environmental problems: *global warming – глобальне потепління, greenhouse effect – парниковий ефект,* etc.
7. Names of characteristics and attributes, connected with environmental protection: *fertility – родючість, transparency – прозорість,* etc.
8. Names of laws, principles, norms and rules*: emission standard – норми викиду.*
9. Names of indexes, coefficients and values: *water pollution index – індекс ступеня забруднення води, diversity index – показник різноманітності біологічних видів,* etc.
10. Names of acts and reports on environmental protection: *Kyoto protocol – Кіотський протокол, Endangered Species Act – Закон про охорону видів рослин і тварин, що вимирають*, etc.
11. Names of facilities that promote environmental renovation: *Green Peace – Грін*

Піс, etc.

1.2 Theoretical background of translating professional terminology

The significance of translating professional terminology cannot be underestimated. Translation of specialized texts for familiarization and further use by professionals and amateurs is highly important in all spheres of life, as this is a way of sharing knowledge. Specialized texts are often abundant with terms, terminology usually constitutes a large part of the text itself and is crucial for understanding the presented information.

There may be two types of translators when it comes to their proficiency in translating specialized literature. The first group consists of specialized translators who were trained as scientists and began translating; they have a thorough comprehension of the ideas in the subject matter, but they typically lack proficiency and experience in the translation process. The second group consists of linguists with specific training who translate specialized literature. Although they are skilled translators, they typically do not understand scientific concepts. [16: 34]. The situation in both of these types of translators may be improved with the help of different tools and techniques. As a rule, translator of terms should possess some knowledge of the sphere of source text, understand the content of terms in source language (further abbreviated to SL) and know the respective terminology in target language (further abbreviated to TL) [1: 126]. In our study, source language is English, target language is Ukrainian.

Translation of professional terminology may pose some difficulties for translators, as this part of lexis is constantly developing and is popular among professionals from different spheres. It is worth mentioning that adequate translation of terms is not possible without translator's additional knowledge of origin, classification, functioning and peculiarities of translation of terms [1: 126]. Problems in translation of terms may arise due to divergence in English and Ukrainian worldviews, peculiarities in polysemy in the respective languages, absence of equivalents in the TL, peculiarities in word formation and term formation, etc. [6: 719]. There are certain attributes of terms that should be precisely conveyed in translation.

Term that is translated from SL into TL should refer to one and the same concept, incorporate all the nuances of the original term and fulfil the same role in the text. As a rule, there should be one definite translation of the term (that is applied to terms, used in one field, as it does not always work with interdisciplinary polysemy).

One of the main aspects in translation of terminology is consistency of terms. Consistency is replicating a consistent pattern of the term use in source text (further abbreviated to ST) that is retained in the target text (further abbreviated to TT) [22: 110]. Maintaining consistency of terms in translation means using one well-motivated translation of term throughout whole TT. Failing to manage terminological consistency could have a negative impact. For example, that could hinder communication and create confusion [18: 306].

General rules that should be followed during the translation of specialized texts with terminology are as follows [4: 38]:

1. Terms used in translation have to be unified and synonymous translation should be avoided;
2. Translator has to take field that the term refers to into consideration;
3. In case translator faces term that has not been recorded in specialized dictionaries, the translator has to choose translation equivalent or, as a last resort, translate the term descriptively;
4. Unjustified abbreviation of terms is not allowed;
5. Terms, foreign to the TL, should be left in brackets in the TT;
6. Names in Latin are not translated, they are left in their original form;
7. Units of physical quantities have to meet the standards in translation.

It must be mentioned that there are two stages in the process of translation of terms [1: 126]. Firstly, translator needs to find out the meaning of the term in the context. Secondly, he needs to translate the meaning into TL. That way translator can ensure that his translation is faithful.

It is possible to distinguish 6 ways of translation of terms and 3 translation transformations. They are usage of respective equivalent, transcoding, usage of calque,

descriptive translation, concretization, generalization and omission, addition, transposition respectively. The most productive ways of translation are usage of equivalent, usage of calque or descriptive translation.

The main way of translation of terms is usage of lexical equivalent that is a permanent consistent lexical unit that completely corresponds to the meaning of the word [1: 126]. Although, translator does not always find equivalent of the term in the dictionary or specialized literature, so there is a need to coin their own equivalent in the TL.

The easiest way to translate a term is to transcode it. Transcoding is a way of translation when sound or graphic form of the word in SL is expressed with the help of alphabet in the TL. There are 4 ways of transcoding: transcription, transliteration, mixed transcoding (transcription is used together with transliteration) and adaptive transcoding. Transcoding may be used for translation in case there are no equivalent of the term in TL and translator cannot find appropriate word for its translation. This way of translation may be particularly useful if there is a need to create strictly monosemic term. Transcoding can also be helpful if the part of the word is of Latin or Greek origin [6: 721]. It is better for translator to double-check whether there are no equivalent for the term in the TL before using this way of translation in order to avoid creating synonymous terms that harm the system of terms [1: 127].

One of the main prolific ways of translation of terms is usage of calque, that is creation of word in the TL via literal translation of the word in SL. This way may be applied when translating the whole term or its constituent (in case the term consists of several words) [5: 29]. Translators use calque instead of transcoding in translation as units, that have no real sense in the TL may appear during transcoding process. However, when using calque, translators resort to different transformations with the word forms due to the differences in SL and TL. Usually, they change the case of the translated word, number of words or word order [1: 127].

Another productive way of translation of terms is descriptive translation. During descriptive translation, term in SL is translated with the help of collocation or a phrase

in TL that conveys the meaning of the original term [1: 127]. There are some requirements that should be observed when using this way of translation: 1) translation should precisely convey the content of the original term; 2) translation should be concise; 3) syntactical structure of translation should be easy to understand. However, there are also some drawbacks of descriptive translation. Term may be interpreted with ambiguity or the translation may be not concise enough and that violates the key characteristic of terms, that is laconism [6: 723].

If all of the mentioned ways of translation are not appropriate during translation process, translators may turn to concretization and generalization. In the process of concretization, a unit of a broader semantics is expressed in the TL with a unit of narrower semantics [6: 724]. The process of generalization is completely opposite to the process of concretization.

Such transformations as omission and addition of some elements in the structure of the term as well as transposition can be used during translation. Omission involves reduction of the term in order to adapt the term to the TL. Addition is an increase in the volume of the term in order to convey the content of the term in the TL. During transposition, the elements of the term change their order.

Speaking of translation of terms in the field of environmental protection, they are mainly translated with the help of equivalents or calque. Descriptive translation may also be used in rare cases. As for transformations in the translation, addition and transposition are usually applied during translation process.

Terms that express categorical notions of environmental protection (*water, forest, air,* etc.) are usually translated with the help of equivalents (*вода, ліс, повітря* respectively), as these terms are mostly one-word terms that describe general phenomena, pertinent to any language. Terms that have common ecological prefixes (bio-, eco-) are usually translated with the help of calque (*biodiversity – біорізноманіття, bioaccumulation – біоакумуляція, eco-efficiency – екологічна ефективність,* etc.). Descriptive translation is not so popular in translating terms from the field of environmental protection, but is still used to transfer some complex terms

into TL (*discharge standards – норми якості скидання стічних вод, diversity index – показник різноманітності біологічних видів*).

Terms that consist of two and more elements are usually translated with the help of some transformations. Transposition is usually applied due to the abundance of noun clusters in English that may be formed with two or more nouns at a time (*oil spill – витік нафти, biodiversity reduction – зниження біорізноманіття,* etc.). Translation of such noun clusters also requires addition of prepositions (*environmental legislation – законодавство про довкілля, grit chamber – відстійник для піску,* etc.). Addition is another common transformation, applied in the translation of environmental protection terms, as English terms are more compact and two-word term may contain a big part of information (*treatment system – система очищення стічних вод, emergency plan – план заходів для надзвичайних ситуацій,* etc.) Omission is not as common in translation of the aforementioned terms from English into Ukrainian, but there are some examples (*effluent treatment plant – водоочисний завод,* etc.).

1.3 Specifics of mass media discourse text analysis

The subject under consideration is mass media discourse. We have chosen the definition given by T. H. Dobrosklonska, as it reflects the discourse in the best way possible. According to it, mass media discourse is a set of processes and products of language activity in the field of mass communication in all the richness and complexity of its interaction [2: 26]. Media discourse encompasses not only the message itself, but also various extralinguistic features that are related to the addressee, his background and also historical, political and social contexts [9: 231]. It should be noted that mass media discourse mirrors the state of society and reflects both positive and negative aspects of its development through time [13].

There are several classifications of mass media discourse, we can distinguish its classification according to the channels of transmission of information (discourse of press, radio, television and Internet), or field of information (political, economic, scientific, sport, educational and other types of discourse) [9: 231]. Another way to classify mass media discourse was presented by S. Maksimov. He differentiates three

subtypes where the main focus is placed on the type of information. These subtypes are as follows:

1. Discourse of news items. Only news articles (either in print press or electronic media) relate to this subtype;
2. Discourse of the print press, that contains articles and essays in newspapers and magazines with additional commentaries from the writers or editors, their judgements and arguments;
3. Discourse of the electronic media, that constitutes of advertisements, announcements, interviews on the radio, TV and the Internet [7: 81].

We can consider discourse of news items the main type of mass media discourse as news perform informative function [19: 187], they create this bridge between reality and addressees. Nevertheless, mass media discourse (especially discourse of print press and electronic media) also plays another important function, that is persuasive [7: 81]. Some mass media texts are also aimed at the change of behaviour or attitude of the addressee, but it is realized in different way. These texts do not only inform, but also convince and induce addressee to some actions. For example, advertisements inform readers/viewers about the product they are selling and also try to encourage them to buy this product by different means.

All of mass media texts refer to real facts and argumentation, they reflect the real world. Speaking of the linguistic and stylistic features of these texts, the usage of lexicon is precise, special attention is paid to accuracy of proper and geographical names [7: 54], there is a large percentage of stable and cliched expressions, journalistic stamps, evaluative epithets and direct appeals to the readers in order to attract their attention and place evaluative accents [17: 46]. Language of mass media is full of realities, allusions and quotations [17: 47]. The major difference between the discourse of news and discourse of print press and electronic media in the aforementioned classification is that various stylistic devices and expressive means are used in order to influence the addressees in print press and electronic media articles and essays. Another distinctive feature of mass media discourse is use of visual and audio means

of communication. News article is always followed by a picture, advertisements usually incorporate music and different sound effects.

Texts of the first subtype of mass media discourse are considered to be of artefact type (such texts are used for “changing” or “reflecting” the real world). Texts of the next subtypes are grey zone texts (such texts deal with the fact of the real world, but have some features of fictional texts). Temporal deixis of mass media discourse texts is past, present and future [7: 54].

Here is the news article for the analysis, taken from website The Guardian.

Title: *Scientists confirm record highs for three most important heat-trapping gases*

Text: ***Global concentrations of carbon dioxide, methane and nitrous oxide climbed to unseen levels in 2023, underlining climate crisis***

Oliver Milman

Sat 6 Apr 2024 23.01 CEST

The levels of the three most important heat-trapping gases in the atmosphere reached new record highs again last year, US scientists have confirmed, underlining the escalating challenge posed by the climate crisis.

The global concentration of carbon dioxide, the most important and prevalent of the greenhouse gases emitted by human activity, rose to an average of 419 parts per million in the atmosphere in 2023 while methane, a powerful if shorter-lasting greenhouse gas, rose to an average of 1922 parts per billion. Levels of nitrous oxide, the third most significant human-caused warming emission, climbed slightly to 336 parts per billion.

The increases do not quite match the record jumps seen in recent years, according to the National Oceanic and Atmospheric Administration (Noaa), but still represent a major change in the composition of the atmosphere even from just a decade ago.

Through the burning of fossil fuels, animal agriculture and deforestation, the world’s CO2 levels are now more than 50% higher than they were before the era of

mass industrialization. Methane, which comes from sources including oil and gas drilling and livestock, has surged even more dramatically in recent years, Noaa said, and now has atmospheric concentrations 160% larger than in pre-industrial times.

Noaa said the onward march of greenhouse gas levels was due to the continued use of fossil fuels, as well as the impact of wildfires, which spew carbon-laden smoke into the air. Nitrous oxide, meanwhile, has risen due to the widespread use of nitrogen fertilizer and the intensification of agriculture.

"As these numbers show, we still have a lot of work to do to make meaningful progress in reducing the amount of greenhouse gases accumulating in the atmosphere," said Vanda Grubišić, director of Noaa's global monitoring laboratory.

The increasing presence of greenhouse gases is spurring a rise in global temperature – last year was the hottest ever measured worldwide – and well as associated impacts such as floods, droughts, heatwaves and wildfires.

It is also pushing the world into a state not seen since prior to human civilization. Carbon dioxide levels today are now comparable to what they were around 4m years ago, Noaa said, an era when sea were around 75ft higher than they are today, the average temperature was far hotter and large forests occupied areas of the now-frozen Arctic.

Because of a lag between CO2 levels and their impact, as well as the hundreds of years that the emissions remain in the atmosphere, the timescale of the climate crisis is enormous. Scientists have warned that governments need to rapidly slash emissions to net zero, and then start removing carbon from the atmosphere to bring down future temperature increases.

The text titled **"Scientists confirm record highs for three most important heat-trapping gases"** was taken from online newspaper The Guardian. It was written by Oliver Milman and published on April, 6, 2024.

The text was preceded by a photo with caption underneath it: "A young woman protects herself from the sun in São Paulo, Brazil, on 14 November 2023. Photograph: Sebastião Moreira/EPA". Apart from visual material, the title of the text catches

readers' attention and makes them open the full version. Catchy titles as well as such matter-of-fact way of presentation of information are pertinent to mass media discourse, so it can be inferred that this text is news article and it belongs to mass media discourse and particularly to the discourse of news.

This text belongs to artefact type, as it "reflects" the real world. Its main function is informative, as the author informs readers about the significant rise of concentration of three gases that cause greenhouse effect and eventually global warming in the atmosphere.

This text does not contain so many stylistic devices and expressive means, as it deals with the field of environmental protection, however there can be found some epithets that describe phenomena: *escalating, prevalent, powerful, major, meaningful, enormous.* All of these epithets are of evaluative character. Also, there is a couple of metaphors: "*the onward march of greenhouse gas levels*" that compares increase in gas levels with the advancing army, implying relentless progression; "*wildfires, which spew carbon-laden smoke*" that compares fires with people or animals that spew something out.

Speaking of the text vocabulary, there are some names mentioned: name of the article's author (*Oliver Milman*) and name of the director of monitoring laboratory (*Vanda Grubišić*). It must be noted that name of the director is foreign to English language, but its spelling remains in a way that it is in this person's native language. There is proper name of agency (*National Oceanic and Atmospheric Administration*) with its abbreviated version in brackets (*Noaa*). The abbreviation is used further in the text as a way to save the space. Geographical name (*the Arctic*) is also mentioned.

Asyndetic noun clusters constitute a reasonable part of the text, as they are commonly used in English: *climate crisis, greenhouse gases, human activity, animal agriculture, gas drilling, nitrogen fertilizer, monitoring laboratory, human civilization, carbon dioxide levels, temperature increases.* These clusters are mainly two-componential.

Furthermore, this text is abundant with subject field terms from chemistry:

carbon dioxide, methane, nitrous oxide, CO2, carbon; and field of environmental protection: *atmosphere, heat-trapping gases, climate crisis, greenhouse gases, emission, fossil fuels, deforestation, wildfires, nitrogen fertilizer, floods, droughts, heatwaves.* These terms create accurate and concise presentation of information, operating facts in professional manner. Apart from subject field terms, the text contains figures (*419 parts per million, in 2023, 1922 parts per billion, 336 parts per billion, 50% higher, 160% larger,* etc.) that provide factual information.

There are also some internationalisms: *concentration, million, agriculture, industrialization, decade, era, intensification, progress, laboratory, global, temperature, civilization, climate, crisis.* These words are quite common not only in mass media discourse, but also in other discourses. Text also possesses quotation from Vanda Grubišić, director of Noaa's global monitoring laboratory: *"As these numbers show, we still have a lot of work to do to make meaningful progress in reducing the amount of greenhouse gases accumulating in the atmosphere"*. This direct quotation represents the expert's view on the present problem and possible solutions.

CHAPTER 2.
PROFESSIONAL TERMINOLOGY IN THE FIELD OF ENVIRONMENTAL PROTECTION IN MASS MEDIA DISCOURSE

News articles in the field of environmental protection for translation were taken from such online resources and newspapers as Euronews, The Guardian, The New York Times, NBC News, Reuters, ABC News and BBC News. Terms were translated from English (source language) into Ukrainian (target language).

In the course of our research, we found out that for translation of professional terminology in the field of environmental protection in mass media discourse we can apply lexical (including lexical and semantic) transformations as well as grammatical transformations.

2.1 Lexical transformations in the translation of professional terminology in the field of environmental protection in mass media discourse

Loan translation takes the first place in lexical transformations in the process of translation. It is followed by adaptive transcoding, transliteration and practical transcription.

1. **Loan translation** (calque) is a translation of foreign terms with the help of native lexical units. It is extremely productive in the process of translation of terminology, as a term is unambiguous, so it requires literal translation with clear transfer of its meaning. This transformation is used in translation of sentences 1, 5, 6, 7, 8, 9, 12, 14, 16, 17, 22, 25, 30, 31, 32, 34, 37, 38, 42, 45, 46.

(1) *A legacy of pollutants carried by wildfire smoke lead to ongoing damage to biodiversity and the further degradation of air and water quality, as well as the erosion of fertile soils.* (E) – *Забруднювачі, які розносить дим від лісових пожеж, постійно завдають шкоди біорізноманіттю та в подальшому призводять до погіршення якості повітря та води, а також до ерозії родючих ґрунтів.* This sentence contains 4 terms that were translated, using loan translation (*pollutants – забруднювачі; biodiversity – біорізноманіття, erosion – ерозія; fertile – родючий*)

in order to transmit the meaning of the terms in SL as close as possible to the TL. It is also worth mentioning that transliteration was partially used in the translation of the word “biodiversity” (in the prefix *bio*-).

(5) *The climate crisis and increasingly fierce megafires now threaten to destroy what little remains of their forest habitats.* (TG) – *Кліматична криза та дедалі сильніші мегапожежі тепер загрожують знищити те, що залишилося від їхнього середовища існування в лісі.* This sentence contains 2 terms that were translated with calque: *climate crisis – кліматична криза; megafire – мегапожежа*. It must be noted that the word “megafire” (exceptional fire that devastates a large area [3: URL]) may be translated with the help of addition as “масштабна пожежа” or “величезна пожежа”. However, in order not to confuse the reader, we opted for “мегапожежа”, as in the context the word is modified by adjective in comparative form “сильніші”.

(7) *Like carbon dioxide, the main greenhouse gas that’s warming the world, methane acts like a blanket in the sky, trapping the sun’s heat.* (NYT) – *Подібно до вуглекислого газу, основного парникового газу, який нагріває планету, метан діє як ковдра в небі, затримуючи сонячне тепло.* The term “greenhouse gas” has already become a part of our reality, so it is traditionally translated as “парниковий газ”, but not “тепличний газ”.

(8) *The Environmental Protection Agency estimates that landfills are the third largest source of human-caused methane emissions in the United States, emitting as much greenhouse gas as 23 million gasoline cars driven for a year.* (NYT) – *За оцінками Управління з охорони навколишнього середовища, сміттєзвалища є третім за величиною джерелом антропогенних викидів метану в Сполучених Штатах. Сміттєзвалища продукують стільки ж парникових газів як і 23 мільйони автомобілів, що працюють на бензині протягом року.* This sentence contains 2 terms (*landfills, emissions*), where the first term “landfills” was translated as “сміттєзвалища”. It must be noted that this word can be translated with another calque as “звалища” or applying addition “сміттєві звалища”. However, we decided

to use one-word translation “сміттєзвалища” that incorporates all necessary elements (сміття + звалища) in order to minimize the space of the sentence.

(16) *Sceptics are concerned that the oil and gas industry is promoting blue hydrogen as a means to prolong demand for fossil fuels amid the clean energy transition.* (E) – *Скептики стурбовані тим, що нафтогазова промисловість просуває блакитний водень як засіб продовження попиту на викопне паливо під час переходу на екологічно чисту енергію.* This sentence contains 2 terms (*blue hydrogen*, *fossil fuels*) and it must be noted that differentiation of the word “blue” was used in translation of the term “blue hydrogen”, following the tradition of translating this term. Grammatical transformation that implied change of grammatical number of the word “fuels” from plural into singular “паливо” is present in the translation of the second term “fossil fuels”.

(17) *The new rules, which was approved by commissioners in a 3-2 vote, will require large public companies to disclose some aspects of their carbon footprints and also lay out for investors how climate change could put aspects of their businesses at risk.* (NBC) – *Нові правила, які були схвалені членами комісії (три голоси проти двох), вимагатимуть від великих публічних компаній розкривати деякі покази свого вуглецевого сліду, а також пояснювати інвесторам, як зміна клімату може поставити під загрозу перспективи їхнього бізнесу.* The term “carbon footprint” is relatively new in the field of environmental protection, although it already has its tradition in translation – “вуглецевий слід”, but not “карбоновий слід”.

(25) *The EPA's Toxics Release Inventory is a bit of a "blunt instrument" of data because it looks at total mass of contaminants released into the environment in various modes in pounds, without regard to specific toxicity, Reible said.* (ABC) – *За словами Райбла, реєстр викидів токсичних речовин Управління з охорони навколишнього середовища є дещо "неефективним інструментом" даних, оскільки він розглядає загальну масу забруднювачів, що по-різному потрапляють в навколишнє середовище у фунтах, без урахування конкретної токсичності.* Although terms “pollutants” and “contaminants” possess some slight differences in their meanings,

they may be considered synonyms, so their Ukrainian translation is universal – “забруднювачі”.

(31) *The USA has placed the first ever federal limits on toxic 'forever chemicals' in drinking water.* (E) – *США встановили перші федеральні обмеження щодо токсичних «вічних хімікатів» у питній воді.* This sentence contains 2 terms that are translated with calque: *toxic – токсичний, “forever chemicals” – «вічні хімікати».* Term “forever chemicals” refers to per- and polyfluoroalkyl substances (PFAS) [3: URL]. They are persistent and indestructible, thus they are called “forever (chemicals)”. In Ukrainian the meaning was clearly transferred with the help of literal translation “вічні хімікати”.

(32) *“It's that accumulation that's the problem,” says Scott Belcher, a North Carolina State University professor who researches PFAS toxicity.* (E) *– «Проблема полягає в їх накопиченні», — зазначає Скотт Белчер, професор Університету штату Північна Кароліна, який досліджує токсичність ПФАР.* This sentence contains 2 terms: *toxicity; PFAS.* PFAS is decoded as per- and polyfluoroalkyl substances. Decoded term was used at the very beginning of the article and then was utilized in the abbreviated form, so we decided to maintain the same abbreviation in the translation. Decoded term was translated into Ukrainian – “пер- і поліфторалкільні речовини” and then abbreviated into “ПФАР”.

2. **Adaptive transcoding** is copying the form of the word while partially adapting it to the TL norms. It is used for translation of some terms that are considered internationalisms as well as particular terms from the field of environmental protection. This transformation is used in translation of sentences 11, 13, 15, 23, 39, 50.

(13) *The destruction of the Nova Kakhovka dam in June 2023 caused an undeniable ecocide — an ecological disaster that extends far beyond Ukraine’s borders and will have lasting effects on the entire Black Sea region.* (E) *– Руйнування дамби у Новій Каховці в червні 2023 року спричинило беззаперечний екоцид — екологічну катастрофу, яка виходить далеко за межі України та матиме довготривалі наслідки для всього Чорноморського регіону.* The term “ecocide” is

relatively new in the field of environmental protection, however recently it has started to proliferate in mass media discourse due to events in the world. This term is translated with the help of adaptive transcoding because it does not require additional explanation as its brief explanation is provided in the sentence ("*ecological disaster"*).

(15) *Backers of hydrogen say carbon capture and storage (CCS) can be used to effectively decarbonise fossil-fuel based hydrogen production.* (E) – *Прихильники водню зазначають, що уловлення та зберігання вуглецю (УЗВ) можна використовувати для ефективної декарбонізації виробництва водню на основі викопного палива.* Apart from adaptive transcoding (*decarbonise – декарбонізація*) another transformation was used in translation of the term. Grammatical transformation that implied the change of grammatical category of the word occurred. Verb "decarbonise" has become a noun "декарбонізація".

(23) *Nitrates can also lead to eutrophication issues in bodies of water, including low oxygen levels, growth of algae and waterways, Reible said.* (ABC) – *За словами Райбла, нітрати також можуть призвести до ейтрофікації водойм, включаючи низький рівень кисню, ріст водоростей і розширення водних шляхів.* No additional explanation of the term "eutrophication" was needed, as sentence already mentions some of the features of this process. Thus, only adaptive transcoding was used in the translation (*eutrophication – ейтрофікація*).

(50) *The Environmental Protection Agency is imposing new restrictions on the emissions of ethylene oxide, a colorless gas that is widely used to sterilize medical devices and is also a carcinogen.* (NYT) – *Агентство з охорони навколишнього середовища вводить нові обмеження на викиди етиленоксиду, безбарвного газу, який широко використовується для стерилізації медичних приладів, а також є канцерогеном.* Apart from transferring the form of the word into TL (*етилен оксид*), there was merging of two words in one.

3. **Transliteration** is reproduction of the letters of the SL lexical item by the TL letters. It is productive for translation of chemical substances, as their names are considered universal for different languages. This transformation is used in translation

of sentences 7, 23, 28, 47.

(7) *Like carbon dioxide, the main greenhouse gas that's warming the world, methane acts like a blanket in the sky, trapping the sun's heat.* (NYT) – *Подібно до вуглекислого газу, основного парникового газу, який нагріває планету, метан діє як ковдра в небі, затримуючи сонячне тепло.* Name of gas "methane" is transliterated into Ukrainian as "метан" with omission of two letters – "h" and final "e".

(23) *Nitrates can also lead to eutrophication issues in bodies of water, including low oxygen levels, growth of algae and waterways, Reible said.* (ABC) – *За словами Райбла, нітрати також можуть призвести до еутрофікації водойм, включаючи низький рівень кисню, ріст водоростей і розширення водних шляхів.* Name of chemical substance "nitrate" is transliterated into Ukrainian as "нітрат" with omission of final "e".

(47) *The Biden administration on Monday finalized a ban on the only type of asbestos still used in the United States, the first time since 1989 the federal government has moved to significantly restrict the toxic industrial material.* (NYT) – *У понеділок адміністрація Байдена завершила документ про заборону на єдиний тип азбесту, який досі використовується в Сполучених Штатах. Вперше з 1989 року федеральний уряд суттєво обмежив використання токсичного промислового матеріалу.* Name of mineral is transliterated into Ukrainian as "азбест" with omission of final "os".

4. **Practical transcription** is reproduction of the SL lexical item phonemes by the TL graphemes. This transformation is used in translation of sentence 18.

(18) *"I think it will help limit and guard against greenwashing," Gensler said.* (NBC) – *«Я вважаю, що це допоможе обмежити і захистити від гріновошингу», — сказав Генслер.* The term "greenwashing" is also relatively new in the field, it refers to advertising or marketing strategy in which green PR and green marketing are deceptively used to persuade the public that an organization's products, aims, and policies are environmentally friendly [3: URL]. This term was not explained in the

translated sentence, as it was utilized in the quotation of an expert. It is up to translator to decide whether to make a reference with explanation for this term at the bottom of the article.

Speaking of lexical and semantic transformations, they are equally found in translation of the terms in the field of environmental protection. Descriptive translation as well as differentiation, modulation, generalization and substantiation (concretization) were used in the process of translation.

1. **Descriptive translation** involves rendering the meaning of the term with a collocation or a phrase. It is used in translation of sentence 4.

(4) *The northern spotted owls were listed as threatened in 1990 after fierce campaigning by environmentalists who fought to protect the ancient forests where the birds nest from the logging.* (TG) - *У 1990 році північних плямистих сов внесли до списку тварин, що знаходяться під загрозою зникнення, після запеклої кампанії захисників навколишнього середовища, які боролися за захист давніх лісів, де гніздяться птахи, від вирубки.* The sentence contains 2 terms that were translated descriptively (*threatened – тварини, що знаходяться під загрозою зникнення; environmentalists – захисники навколишнього середовища*) due to the necessity to accurately convey their meaning in TL. It is possible to translate “threatened” as “під загрозою”, although it may confuse the reader. Thus, we opted for concise description. In order to preserve the meaning of protection of the environment, descriptive term “захисники навколишнього середовища” was utilized.

2. **Differentiation** is choosing the best option for translation of the word among various options. It appeared to be quite common for translating terms of the given field, as there was a need to find a word that perfectly suits the context. This transformation is used in translation of sentences 1, 7, 10, 20, 24, 30, 36.

(1) *A legacy of pollutants carried by wildfire smoke lead to ongoing damage to biodiversity and the further degradation of air and water quality, as well as the erosion of fertile soils.* (E) – *Забруднювачі, які розносить дим від лісових пожеж, постійно завдають шкоди біорізноманіттю та в подальшому призводять до*

погіршення якості повітря та води, а також до ерозії родючих ґрунтів. There are a couple ways to translate the term “degradation” – “деградація”, “погіршення”, “послаблення”. As the author talked about the quality of air and water, the most appropriate option for a translator to choose is “погіршення”.

(7) *Like carbon dioxide, the main greenhouse gas that’s warming the world, methane acts like a blanket in the sky, trapping the sun’s heat.* (NYT) – *Подібно до вуглекислого газу, основного парникового газу, який нагріває планету, метан діє як ковдра в небі, затримуючи сонячне тепло.* It is possible to translate “carbon dioxide” as “діоксид карбону”, however this translation will be pertinent to chemistry field whereas in the field of environmental protection “вуглекислий газ” is more usual and understandable.

(10) *Vanuatu is one of the world's most vulnerable countries concerning climate and so-called natural disasters.* (E) – *Вануату є однією з найбільш вразливих країн світу у питанні клімату та так званих природних катаклізмів.* “Disaster” can be translated as “лихо” or “катаклізм”, however there is no such collocation in Ukrainian as “природне лихо”. Collocation “стихійне лихо” is used instead of it. We translated the word “natural” with the help of its equivalent “природний”, thus word “катаклізм” was utilized to complete the collocation.

(20) *Alvarado, who in the past has studied how resilient the Amazon forest is after disturbance, said he’s visited areas that were once rainforests but now look like the U.S. Midwest.* (NBC) – *Альварадо, який у минулому вивчав, наскільки стійкими є ліси Амазонки після дисбалансу, сказав, що він побував на територіях, які колись були тропічними лісами, а тепер виглядають як Середній Захід США.* It is possible to translate “resilient” as “еластичний” or “такий, що має запас життєвих сил”, but none of these options suits the context. We opted for “стійкий” in order to show the characteristic of the forest to withstand all negative impact.

(24) *Farmers can also reduce nitrogen pollution from agriculture by using sustainable farming practices, like reducing tillage, increasing cover crops and changing crop rotations, Woods said.* (ABC) – *За словами Вудса, фермери також*

можуть зменшити забруднення азотом, спричинене сільським господарством, використовуючи екологічні методи ведення сільського господарства, такі як зменшення обробки ґрунту, збільшення посівів покривних культур і зміна сівозмін. It is possible to transliterate “nitrogen” into “нітроген” and use it in the phrase, however we used another option “азот”, as this word is more usual for the field of environmental protection. It is worth mentioning that transposition was also implied in translation of this term.

(30) *The increasing presence of greenhouse gases is spurring a rise in global temperature – last year was the hottest ever measured worldwide – and well as associated impacts such as floods, droughts, heatwaves and wildfires. (TG) – Зростаюча кількість парникових газів стимулює підвищення глобальної температури (минулий рік зафіксували як найспекотніший у всьому світі), а також пов’язані з цим наслідки: повені, посухи, теплові хвилі та лісові пожежі.* If to translate both terms literally, we will end up with such variants as “спекотні хвилі” or “хвилі спеки” and “дикі пожежі” (“heatwaves” and “wildfires” respectively). In order to find the right option for rendering these terms, we utilized definition of these terms: heatwave – a period of abnormally hot weather; wildfire (another name “forest fire”) – an unplanned, uncontrolled and unpredictable fire in an area of combustible vegetation [3: URL]. Eventually, we opted for differentiation of meaning to suit the context.

3. **Modulation** is replacement of the SL term by TL item, which is logically connected with the original item. Usage of modulation also heavily depends on the context as well as translator’s style of work, so this transformation cannot be called common for all translators. This transformation is used in translation of sentences 2, 24, 33, 35, 45, 49.

(2) *We saw in 2015 that Indonesia held the mantle of the greatest carbon emitter in the world as a result of wildfires.* (E) *– У 2015 році ми побачили, що через лісові пожежі Індонезія утримувала першість по викидам вуглецю у світі.* In the ST Indonesia was regarded as “carbon emitter”, however due to total reorganization of the

idiomatic expression “held the mantle” “emitter” has transformed into “emissions” (*викиди*).

(24) *Farmers can also reduce nitrogen pollution from agriculture by using sustainable farming practices, like reducing tillage, increasing cover crops and changing crop rotations, Woods said.* (ABC) – *За словами Вудса, фермери також можуть зменшити забруднення азотом, спричинене сільським господарством, використовуючи екологічні методи ведення сільського господарства, такі як зменшення обробки ґрунту, збільшення посівів покривних культур і зміна сівозмін.* The term “sustainable” is tricky to translate as the translation mostly depends on the context. This word is interpreted as “causing, or made in a way that causes, little or no damage to the environment and therefore able to continue for a long time” [1: URL], so we opted for the option “екологічний” due to certain similarities in their definitions.

(45) *After shutting down, the plants will be converted to solar farms and battery units that can store electricity generated from offshore wind turbines along the Atlantic Coast, the owner said. (NYT) – За словами власника, після закриття заводи перетворять на сонячні електростанції та батареї, які зможуть зберігати електроенергію, вироблену морськими вітровими турбінами, розміщеними вздовж Атлантичного узбережжя.* Solar farm is a large-scale photovoltaic power system [3: URL] that generates electricity from solar energy. Instead of translating this term literally as “сонячна ферма”, we opted for modulation on the base of the given definition.

4. **Generalization** is substitution of the SL words of a narrow meaning by the TL words of a broader meaning. Accuracy is characteristic feature of terms, thus this transformation is not so common in translation of terminology in the field of environmental protection as it may make the term seem blurry. This transformation is used in translation of sentence 6.

(6) *Preventing extinction has become a sisyphean task, said Nelson, and despite government, scientists and conservationists’ best efforts, it remains impossible to*

predict or control exactly how nature will react. (TG) – *За словами Нельсона, запобігти вимиранню – непосильне завдання і, незважаючи на всі зусилля уряду, вчених та екоактивістів, все ще неможливо передбачити або проконтролювати, як саме відреагує природа.* Conservationist is a person who advocates or acts for the protection and preservation of the environment [2: URL]. This term may be translated as "захисник навколишнього середовища", although this translation is quite lengthy. In order to minimize the space we used more general option "екоактивісти".

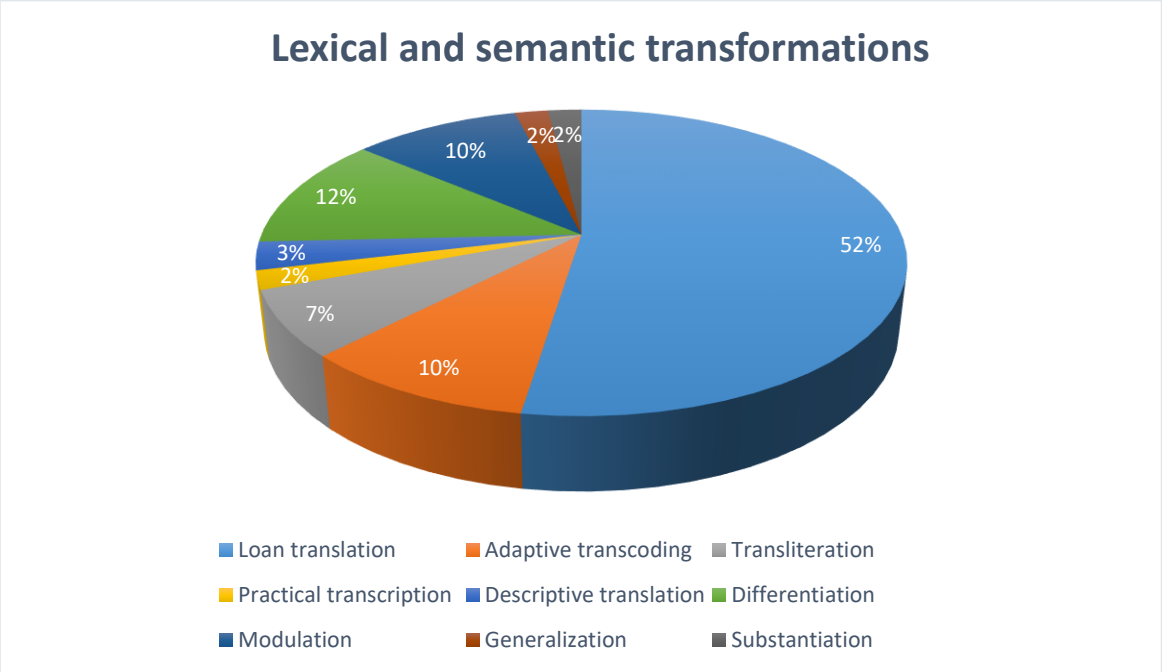
5. **Substantiation (concretization)** is substitution of the SL words with a generic meaning by the TL words with a more specific meaning. Together with generalization, substantiation is not as popular as other transformations in order to avoid errors in transfer of the concept. This transformation is used in translation of sentence 12.

(12) *Beyond the rapid onset of cyclonic winds and rain, climate change is causing acidification of our waters, which is killing the coral reefs and marine life dependent on them.* (E) – *Окрім вітрів та дощів, які приносить циклон, зміна клімату спричиняє підкислення наших вод, що вбиває коралові рифи та морських мешканців, які залежать від них.* It is possible to translate "marine life" as "морське життя", however we wanted to be more specific and chose option of "морські мешканці".

It was found that 60 terms out of 85 terms in the field of environmental protection were translated with the help of lexical and semantic transformations. The main types of transformations and the percentage of their use in the process of translation can be analyzed from the following diagram:

Diagram 2.1

Lexical and semantic transformations in translation of terms



According to the diagram, we can conclude that lexical and semantic transformations constitute a large part in the translation of terms in the field of environmental protection. In total, there are 9 transformations, they are as follows: loan translation, adaptive transcoding, transliteration, practical transcription, descriptive translation, differentiation, modulation, generalization, substantiation. It can be noticed that loan translation amounts to more than a half of all lexical and semantic transformations (53%). It can be explained with the fact that a lot of units of professional terminology in the aforementioned field denote universal concepts, pertinent to both English and Ukrainian languages. Therefore, majority of the terms do not require other transformations than loan translation. Differentiation follows loan translation with 12%. Percentage of this transformation can be attributed to polysemantic nature of English lexicon. Terms are no exception. Thus, during translation process, translators may need to look up several translation options in order to find the one that coincides with the notion in the source language itself and fits the context. Modulation shares its third place with adaptive transcoding, each transformation amounts to 10%. Modulation was used in translation of terms that are highly dependent on words, surrounding them and general context. Adaptive

transcoding was used in a range of various terms in the given field and posed itself useful in translation of different chemical substances with their further adaption for TL. Other transformations are in the minority. It can be inferred that although it is possible to imply various lexical and semantic transformations in the translation of the terms in the field of environmental protection, most of them will be translated with the help of only 3 fundamental transformations.

2.2 Grammatical transformations in the translation of professional terminology in the field of environmental protection in mass media discourse

Addition and transposition are two the most commonly used transformations in translation of professional terminology. However, it is quite difficult to differentiate addition and transposition in translation of particular terms as they are usually utilized together in the process of translation. Omission takes up a small part of grammatical transformations.

1.**Addition** is an increase in the volume of the term in order to convey the content of the term in the TL. It is used to compensate for semantic or grammatical losses. This transformation is used in translation of sentences 5, 16, 19, 21, 22, 25, 29, 41, 43.

(5) *The climate crisis and increasingly fierce megafires now threaten to destroy what little remains of their forest habitats.* (TG) *– Кліматична криза та дедалі сильніші мегапожежі тепер загрожують знищити те, що залишилося від їхнього середовища існування в лісі.* Due to the difference in English and Ukrainian lexicon, there was a need to add the word “існування”.

(16) *Sceptics are concerned that the oil and gas industry is promoting blue hydrogen as a means to prolong demand for fossil fuels amid the clean energy transition.* (E) *– Скептики стурбовані тим, що нафтогазова промисловість просуває блакитний водень як засіб продовження попиту на викопне паливо під час переходу на екологічно чисту енергію.* The word “екологічно” was added in the TL in order to specify the word “чистий”, as in Ukrainian language collocation “чиста енергія” (clean energy) is not so obvious and may confuse the reader.

(21) *Southern Africa is reeling from its worst drought in years, owing to a*

combination of naturally occurring El Nino - when an abnormal warming of the waters in the eastern Pacific radiates heat into the air leading to hotter weather across the world - and higher average temperatures produced by greenhouse gas emissions. (R) *– Південна Африка страждає від найсильнішої посухи за останні роки через поєднання природного феномену Ель-Ніньо – коли аномальне нагрівання води у східній частині Тихого океану випромінює тепло в повітря, що призводить до спекотнішої погоди в усьому світі – та вищих середніх температур, спричинених викидами парникових газів.* The sentence contains the explanation of the phenomenon El Nino, thus there was no need to add extra information. We decided to specify the name of the phenomenon with the word "феномен", though.

(25) *The EPA's Toxics Release Inventory is a bit of a "blunt instrument" of data because it looks at total mass of contaminants released into the environment in various modes in pounds, without regard to specific toxicity, Reible said.* (ABC) *– За словами Райбла, Реєстр викидів токсичних речовин Управління з охорони навколишнього середовища є дещо "неефективним інструментом" даних, оскільки він розглядає загальну масу забруднювачів, що по-різному потрапляють в навколишнє середовище у фунтах, без урахування конкретної токсичності.* It is possible to use loan translation of the word "environment", that is "довкілля", with no change in meaning in the TL, however we opted for the word "навколишнє середовище", as it sounds more natural.

2. **Transposition** is a change of order of words in phrases. The main reason for this transformation to happen is structural differences in SL and TL. This transformation can be explained with the fact that English is abundant in asyndetic clusters that constitute at least 2 elements and do not require any prepositions in their structure. Noun clusters cannot be found in Ukrainian, thus in the process of translation there is a need to change the word order to suit the grammar rules of the TL. There are different ways of translation asyndetic clusters and they are going to be analyzed in the translation of particular terms. This transformation is used in translation of sentences 3, 8, 12, 15, 25, 27, 28, 34, 36, 37, 38, 40.

(3) *The Nature Restoration Law was proposed in 2022 just months before the EU was instrumental in securing a global agreement to protect 30% of the earth's land and sea under the UN Convention on Biological Diversity.* (E) – *Закон про відновлення природи запропонували у 2022 році лише за кілька місяців до того, як ЄС зіграв важливу роль у забезпеченні глобальної угоди щодо захисту 30% суші та моря відповідно до Конвенції ООН про біологічне різноманіття.* This sentence contains 2 terms and both of them are translated with the use of transposition. The first cluster "The Nature Restoration Law" (adjunct noun + adjunct noun + head noun) was translated in 3-2-1 order – "Закон про відновлення природи". Preposition "про" was added in the TL term. The second cluster "The UN Convention on Biological Diversity" (adjunct noun + head noun + adjective + second noun) was translated in 2-1-3-4 order – "Конвенція ООН про біологічне різноманіття".

(8) *The Environmental Protection Agency estimates that landfills are the third largest source of human-caused methane emissions in the United States, emitting as much greenhouse gas as 23 million gasoline cars driven for a year.* (NYT) – *За оцінками Управління з охорони навколишнього середовища, сміттєзвалища є третім за величиною джерелом антропогенних викидів метану в Сполучених Штатах. Сміттєзвалища продукують стільки ж парникових газів як і 23 мільйони автомобілів, що працюють на бензині протягом року.* This cluster has adjective + adjunct noun + head noun structure and it is translated in 3-2-1 order - "Управління з охорони навколишнього середовища". Preposition "з" and the word "навколишній" are also added in the TL.

(15) *Backers of hydrogen say carbon capture and storage (CCS) can be used to effectively decarbonise fossil-fuel based hydrogen production.* (E) – *Прихильники водню зазначають, що уловлення та зберігання вуглецю (УЗВ) можна використовувати для ефективної декарбонізації виробництва водню на основі викопного палива.* This cluster has adjunct noun + head noun + second noun structure and is translated in 2-3-1 order – "уловлення та зберігання вуглецю". Abbreviation of the term was also transmitted into TL by taking the first letter of each element.

(25) *The EPA's Toxics Release Inventory is a bit of a "blunt instrument" of data because it looks at total mass of contaminants released into the environment in various modes in pounds, without regard to specific toxicity, Reible said.* (ABC) – *За словами Райбла, Реєстр викидів токсичних речовин Управління з охорони навколишнього середовища є дещо "неефективним інструментом" даних, оскільки він розглядає загальну масу забруднювачів, що по-різному потрапляють в навколишнє середовище у фунтах, без урахування конкретної токсичності.* This cluster has adjunct noun + second noun + head noun structure and is translated in 3-2-1 order – "Реєстр викидів токсичних речовин". The word "речовини" was also added in the TL term.

3. **Omission** is reduction of the term in TL in order to avoid redundant information. It is not so common, as previous grammatical transformations, however it is still present in translation of terms in the given field. This transformation is used in translation of sentences 36 and 44.

(36) *These include illegal fishing of bluefin tuna, agro-industrial pollution in protected areas, as well as illegal hunting practices and carbon market fraud.* (E) – *До них належать незаконний вилов блакитного тунця, агропромислове забруднення природоохоронних територій, а також незаконне полювання та шахрайство у торгівлі викидами.* The word "practices" was taken out in the process of translation as the word "полювання" ("hunting") encompasses different methods of chasing for animals.

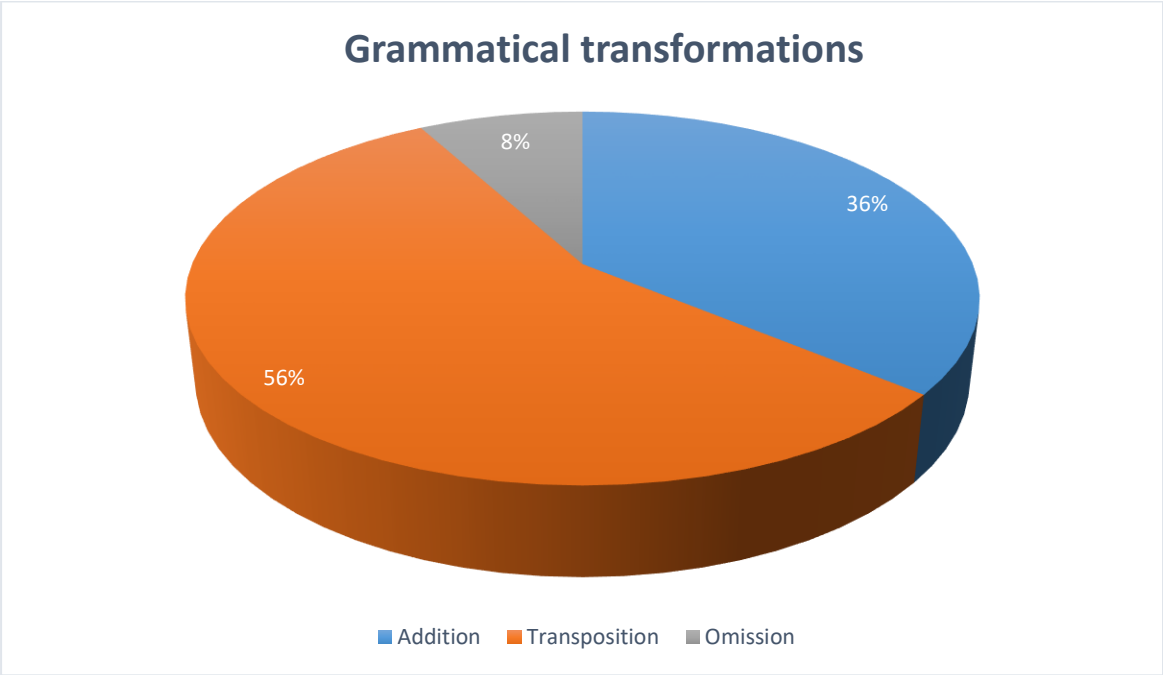
(44) *The last two coal-fired power plants in New England are set to close by 2025 and 2028, ending the use of a fossil fuel that supplied electricity to the region for more than 50 years.* (NYT) – *В планах закрити останні дві вугільні електростанції в Новій Англії до 2025 і 2028 років, поклавши край використанню викопного палива, яке постачало електроенергію в регіон більше 50 років.* Element "coal-fired" was reduced to just "coal" ("вугільні") in translation and power plants was merged in one word "електростанції", common for Ukrainian language.

It was found that 25 terms out of 85 terms in the field of environmental protection

were translated with the help of grammatical transformations. The main types of transformations and the percentage of their use in the process of translation can be analyzed from the following diagram:

Diagram 2.2

Grammatical transformations in translation of terms

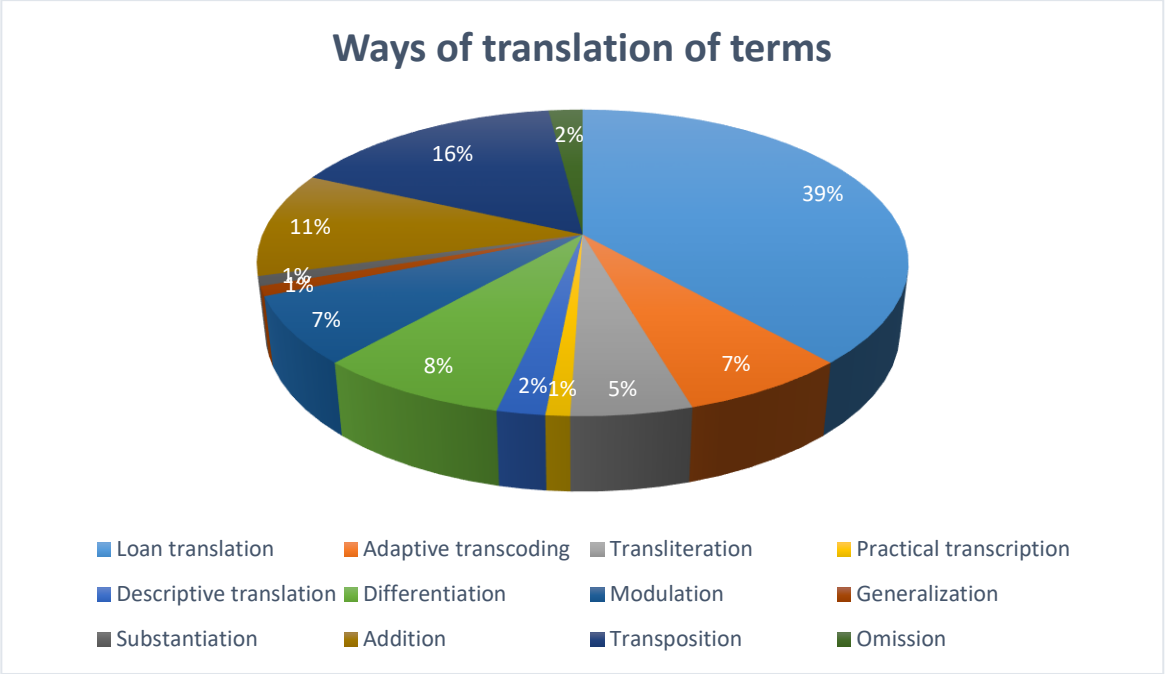


According to the diagram, we can conclude that grammatical transformations are utilized in one-third of 85 terms under consideration. Transposition amounts to more than a half of all grammatical transformations with 56%, addition follows with 36% and omission with mere 8%. Transposition proved to be very productive transformation due to the differences in composition of word combinations. English language is full of clusters, especially this can be said about the field under consideration with its lengthy names of organizations, laws and inventories. This linguistic phenomenon is not pertinent for Ukrainian language, thus change of word order is necessary when dealing with these clusters. During translation process, it was noticed that in all English asyndetic clusters with head nouns at the end the nouns were placed in the initial position in Ukrainian translation. Proliferation of addition can be explained with a fact that English terms are usually more compact than their Ukrainian counterparts, thus there is a need to use additional words in translation into Ukrainian. It was noticed that

SL one-word terms were mostly translated by TL two-word terms. This transformation was found in a wide range of terms in the field of environmental protection, starting from natural areas and finishing with modern processes in the energy production industry. Omission was used only in two cases during translation process and such low percentage of this transformation can be explained by the necessity to maintain significant information each element of the term carries in translation, as redundancy of information can be rarely found in such lexical units as terms.

Diagram 2.3

Ways of translation of terms



To sum up, we have translated 50 sentences from English into Ukrainian and analyzed ways of translation of 85 terms in the field of environmental protection. It was found that 70% of all transformations amounts to lexical and semantic transformations while 30% is attributed to grammatical transformations.

Among lexical and semantic transformations, we can point out 4 most productive transformations. They are loan translation, differentiation, modulation and adaptive transcoding. They constitute 39%, 8%, 7% and 7% of all transformations respectively. These transformations can be considered productive in translation of terms in the field of environmental protection.

Grammatical transformations, namely transposition, addition and omission, appeared to be pretty scarce, however they still take up 16%, 11% and 2% of all transformations respectively.

It can be inferred that other transformations that were not used in the translation process (traditional reproduction, such lexical and grammatical transformations as antonymic translation, total reorganization and compensation) are not productive in the translation of terminology in the aforementioned field, as they may be used in rare occasions.

CONCLUSIONS

Having conducted the research on the ways of reproducing professional terminology in the field of environmental protection from English into Ukrainian on the base of mass media texts, we reached the aim, that was stated at the beginning of our work.

In theoretical part we have studied all peculiarities of terms in the field of environmental protection. These terms express current challenges in the environment and possible solutions to them. Our lexical units under consideration can be characterized as unambiguous, accurate, concise and stylistically neutral. In the course of analysis of mass media texts in the practical part, we have noticed that a large part of terms constitutes of one or two elements. Such terms predominantly denote natural disasters, man-made activities, negative processes happening in the environment, etc. Terms with three and more elements in their structure that formed asyndetic clusters designate environmental organizations, governmental regulations regarding environmental protection, etc.

After analyzing 50 sentences with 85 terms in the field of environmental protection and their translation from English into Ukrainian, among all the ways of rendering the most productive ones turned out to be such lexical and semantic transformations as loan translation (39%), differentiation (8%), modulation and adaptive transcoding (7% each) as well as two grammatical transformations that are transposition (16%) and addition (11%). Transliteration, practical transcription, generalization, substantiation and descriptive translation posed themselves as not so productive ways of translations of terms in the given field. Lexical and grammatical transformations were completely absent in the process of translation due to monosemic nature of terms, as their meaning cannot be interpreted figuratively.

Further research in the area of professional terminology in studied field has some prospects. Given field is constantly evolving, so do its terminology. It is crucial to keep pace with all technological advancements and novelties in order to record and standardize arising terms as well as apply discussed transformations for their rendering.

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7. (R) – Reuters. URL: https://www.reuters.com/

ANNEX

№	English	Ukrainian
1.	A legacy of **pollutants** carried by wildfire smoke lead to ongoing damage to **biodiversity** and the further **degradation** of air and water quality, as well as the **erosion** of **fertile** soils.	**Забруднювачі**, які розносить дим від лісових пожеж, постійно завдають шкоди **біорізноманіттю** та в подальшому призводять до **погіршення** якості повітря та води, а також до **ерозії родючих** ґрунтів.
2.	We saw in 2015 that Indonesia held the mantle of the greatest **carbon emitter** in the world as a result of wildfires.	У 2015 році ми побачили, що через лісові пожежі Індонезія утримувала першість по **викидам вуглецю** у світі.
3.	**The Nature Restoration Law** was proposed in 2022 just months before the EU was instrumental in securing a global agreement to protect 30% of the earth's land and sea under **the UN Convention on Biological Diversity.**	**Закон про відновлення природи** запропонували у 2022 році лише за кілька місяців до того, як ЄС зіграв важливу роль у забезпеченні глобальної угоди щодо захисту 30% суші та моря відповідно до **Конвенції ООН про біологічне різноманіття.**
4.	The northern spotted owls were listed as **threatened** in 1990 after fierce campaigning by **environmentalists** who fought to protect the ancient forests where the birds nest from the logging.	У 1990 році північних плямистих сов внесли до списку **тварин, що знаходяться під загрозою зникнення,** після запеклої кампанії **захисників навколишнього середовища**, які боролися за захист давніх лісів, де гніздяться птахи, від вирубки.
5.	The **climate crisis** and increasingly fierce **megafires** now threaten to destroy what little remains of their forest **habitats.**	**Кліматична криза** та дедалі сильніші **мегапожежі** тепер загрожують знищити те, що залишилося від їхнього **середовища існування** в лісі.
6.	Preventing **extinction** has become a sisyphean task, said Nelson, and despite government, scientists and	За словами Нельсона, запобігти **вимиранню** – непосильне завдання і, незважаючи на всі

	conservationists' best efforts, it remains impossible to predict or control exactly how nature will react.	зусилля уряду, вчених та **екоактивістів**, все ще неможливо передбачити або проконтролювати, як саме відреагує природа.
7.	Like **carbon dioxide**, the main **greenhouse gas** that's warming the world, **methane** acts like a blanket in the sky, trapping the sun's heat.	Подібно до **вуглекислого газу**, основного **парникового газу**, який нагріває планету, **метан** діє як ковдра в небі, затримуючи сонячне тепло.
8.	**The Environmental Protection Agency** estimates that **landfills** are the third largest source of human-caused methane **emissions** in the United States, emitting as much greenhouse gas as 23 million gasoline cars driven for a year.	За оцінками **Управління з охорони навколишнього середовища**, **сміттєзвалища** є третім за величиною джерелом антропогенних **викидів** метану в Сполучених Штатах. Сміттєзвалища продукують стільки ж парникових газів як і 23 мільйони автомобілів, що працюють на бензині протягом року.
9.	**Composting,** on the other hand, generally doesn't produce methane, which is why experts say it can be effective in reducing methane emissions.	**Компостування**, з іншого боку, як правило, не виробляє метан, тому експерти кажуть, що воно може бути ефективним у зниженні викидів метану.
10.	Vanuatu is one of the world's most vulnerable countries concerning climate and so-called **natural disasters.**	Вануату є однією з найбільш вразливих країн світу у питанні клімату та так званих **природних катаклізмів.**
11.	Last year, it was hit by two category-four **cyclones** within three days.	Минулого року Вануату накрили два **циклони** четвертої категорії протягом трьох днів.
12.	Beyond the rapid onset of cyclonic winds and rain, **climate change** is causing **acidification** of our waters, which is killing the coral reefs and **marine life** dependent on them.	Окрім вітрів та дощів, які приносить циклон, **зміна клімату** спричиняє **підкислення** наших вод, що вбиває коралові рифи та **морських мешканців**, які залежать від них.

13.	The destruction of the Nova Kakhovka dam in June 2023 caused an undeniable **ecocide** — an ecological disaster that extends far beyond Ukraine's borders and will have lasting effects on the entire Black Sea region.	Руйнування дамби у Новій Каховці в червні 2023 року спричинило беззаперечний **екоцид** — екологічну катастрофу, яка виходить далеко за межі України та матиме довготривалі наслідки для всього Чорноморського регіону.
14.	The **flooding** joins the **chemical contamination** of thousands of hectares of land and the slaughter of thousands of animals as the terrible environmental toll of the Russian invasion.	До **затоплення** доєднується **хімічне забруднення** тисяч гектарів землі та загибель тисяч тварин, що є жахливою екологічною втратою, спричиненою російським вторгненням.
15.	Backers of hydrogen say **carbon capture and storage (CCS)** can be used to effectively **decarbonise** fossil-fuel based hydrogen production.	Прихильники водню зазначають, що **уловлення та зберігання вуглецю (УЗВ)** можна використовувати для ефективної **декарбонізації** виробництва водню на основі викопного палива.
16.	Sceptics are concerned that the oil and gas industry is promoting **blue hydrogen** as a means to prolong demand for **fossil fuels** amid the **clean energy transition.**	Скептики стурбовані тим, що нафтогазова промисловість просуває **блакитний водень** як засіб продовження попиту на **викопне паливо** під час **переходу на екологічно чисту енергію.**
17.	The new rules, which was approved by commissioners in a 3-2 vote, will require large public companies to disclose some aspects of their **carbon footprints** and also lay out for investors how climate change could put aspects of their businesses at risk.	Нові правила, які були схвалені членами комісії (три голоси проти двох), вимагатимуть від великих публічних компаній розкривати деякі покази свого **вуглецевого сліду**, а також пояснювати інвесторам, як зміна клімату може поставити під загрозу перспективи їхнього бізнесу.

18.	“I think it will help limit and guard against **greenwashing**,” Gensler said.	«Я вважаю, що це допоможе обмежити і захистити від **грінвошингу**», — сказав Генслер.
19.	The **rainforest** is a carbon sink, meaning it stores more carbon than it produces.	**Тропічний ліс** поглинає багато вуглецю, тобто він зберігає більше вуглецю, ніж виробляє.
20.	Alvarado, who in the past has studied how **resilient** the Amazon forest is after disturbance, said he’s visited areas that were once rainforests but now look like the U.S. Midwest.	Альварадо, який у минулому вивчав, наскільки **стійкими** є ліси Амазонки після дисбалансу, сказав, що він побував на територіях, які колись були тропічними лісами, а тепер виглядають як Середній Захід США.
21.	Southern Africa is reeling from its worst drought in years, owing to a combination of naturally occurring **El Nino** - when an abnormal warming of the waters in the eastern Pacific radiates heat into the air leading to hotter weather across the world - and higher average temperatures produced by greenhouse gas emissions.	Південна Африка страждає від найсильнішої посухи за останні роки через поєднання природного **феномену Ель-Ніньо** – коли аномальне нагрівання води у східній частині Тихого океану випромінює тепло в повітря, що призводить до спекотнішої погоди в усьому світі – та вищих середніх температур, спричинених викидами парникових газів.
22.	Some U.S. states are discharging much more **chemical waste** from industrial activity into local **waterways** than others, according to a new analysis of data from the Environmental Protection Agency.	Згідно з новим аналізом даних Управління з охорони навколишнього середовища, деякі штати США скидають набагато більше **хімічних відходів** промислової діяльності в місцеві **водні шляхи**, ніж інші штати.
23.	**Nitrates** can also lead to **eutrophication** issues in bodies of water, including low oxygen levels, growth of algae and waterways, Reible said.	За словами Райбла, **нітрати** також можуть призвести до **евтрофікації** водойм, включаючи низький рівень

		кисню, ріст водоростей і розширення водних шляхів.
24.	Farmers can also reduce **nitrogen pollution** from agriculture by using **sustainable** farming practices, like reducing tillage, increasing cover crops and changing crop rotations, Woods said.	За словами Вудса, фермери також можуть зменшити **забруднення азотом,** спричинене сільським господарством, використовуючи **екологічні** методи ведення сільського господарства, такі як зменшення обробки ґрунту, збільшення посівів покривних культур і зміна сівозмін.
25.	The EPA's **Toxics Release Inventory** is a bit of a "blunt instrument" of data because it looks at total mass of **contaminants** released into the **environment** in various modes in pounds, without regard to specific toxicity, Reible said.	За словами Райбла, **Реєстр викидів токсичних речовин** Управління з охорони навколишнього середовища є дещо "неефективним інструментом" даних, оскільки він розглядає загальну масу **забруднювачів**, що по-різному потрапляють в **навколишнє середовище** у фунтах, без урахування конкретної токсичності.
26.	Cities may not be a useful reporting mechanism for water resources, as cities boundaries can span multiple **watersheds**, Cherkauer said.	За словами Черкауера, міста можуть недостатньо ефективно звітувати про водні ресурси, оскільки межі міст можуть охоплювати кілька **вододілів.**
27.	Levels of **nitrous oxide,** the third most significant human-caused warming emission, climbed slightly to 336 parts per billion.	Рівень **оксиду азоту**, що займає третє місце за кількістю антропогенних викидів, які спричиняють потепління, незначно зріс до 336 частин на мільярд.
28.	The increases do not quite match the record jumps seen in recent years, according to the **National Oceanic and Atmospheric Administration (Noaa)**, but still represent a major change in the composition of the	Згідно з даними **Національного управління океанічних і атмосферних досліджень (НУОАД)**, збільшення концентрації не зовсім відповідає рекордним стрибкам, які

	atmosphere even from just a decade ago.	спостерігалися в останні роки, але все ж це значно змінило склад **атмосфери** у порівняні з тим що було 10 років тому.
29.	Through the burning of fossil fuels, animal agriculture and **deforestation,** the world's CO2 levels are now more than 50% higher than they were before the era of mass industrialization.	Через спалювання викопного палива, тваринництва та **вирубки лісів** рівень CO2 у світі зараз більш ніж на 50% вищий, ніж був до епохи масової індустріалізації.
30.	The increasing presence of greenhouse gases is spurring a rise in global temperature – last year was the hottest ever measured worldwide – and well as associated impacts such as floods, **droughts, heatwaves** and **wildfires.**	Зростаюча кількість парникових газів стимулює підвищення глобальної температури (минулий рік зафіксували як найспекотніший у всьому світі), а також пов'язані з цим наслідки: повені, **посухи, теплові хвилі** та **лісові пожежі.**
31.	The USA has placed the first ever federal limits on **toxic 'forever chemicals'** in drinking water.	США встановили перші федеральні обмеження щодо **токсичних «вічних хімікатів»** у питній воді.
32.	"It's that accumulation that's the problem," says Scott Belcher, a North Carolina State University professor who researches **PFAS toxicity.**	«Проблема полягає в їх накопиченні», — зазначає Скотт Белчер, професор Університету штату Північна Кароліна, який досліджує **токсичність ПФАР.**
33.	Now, Hastings says installing **treatment systems** could be a multi-million dollar endeavour, a major expense for a small customer base.	Тепер Хестінгс каже, що встановлення **очисних систем** може коштувати кілька мільйонів доларів, це великі витрати для невеликої кількості клієнтів.
34.	Ecosystem destruction, including habitat loss and **illegal logging**, will be punished with tougher penalties and prison sentences under the **EU's** updated **environmental crime directive.**	Згідно з оновленою **Директивою ЄС щодо екологічних злочинів**, руйнування екосистем, включаючи втрату середовища існування та **незаконну лісозаготівлю,** каратиметься

		суворішими покараннями та тюремним ув’язненням.
35.	**Environmental crimes** still occur in Europe.	**Екологічні злочини** все ще відбуваються в Європі.
36.	These include **illegal fishing** of bluefin tuna, agro-industrial pollution in protected areas, as well as **illegal hunting practices** and **carbon market fraud.**	До них належать **незаконний вилов** блакитного тунця, агропромислове забруднення природоохоронних територій, а також **незаконне полювання** та **шахрайство у торгівлі викидами.**
37.	**Water abstraction,** ship recycling and pollution, the introduction and spread of **invasive alien species**, and **ozone destruction** are all identified as environmental activities in the new directive.	**Забір води,** утилізація кораблів та забруднення довкілля суднами, введення та поширення **інвазивних чужорідних видів**, а також **руйнування озонового шару** – все це визначено екологічною діяльністю в новій директиві.
38.	Anglian Water said it was upgrading **water recycling centres** across the county to remove phosphorous from **waste water.**	Компанія “Anglian Water” повідомила, що модернізує **центри вторинної переробки води** по всьому графству для видалення фосфору зі **стічних вод.**
39.	**Phosphorous** is found in human waste, food, soaps and detergents and causes excess plant and algal growth in rivers.	**Фосфор** міститься в людських відходах, продуктах харчування, милі та миючих засобах і викликає неконтрольований ріст рослин і водоростей у річках.
40.	In 2023, Anglian Water recorded the biggest increase in **raw sewage discharges** of all of England's water companies, according to figures from the Environment Agency.	У 2023 році Anglian Water зафіксувала наймасштабніше збільшення **викидів неочищених стічних вод** серед усіх водопровідних компаній Англії, згідно з даними Агентства з навколишнього середовища.
41.	A new **wetlands** in Ewell in Surrey will naturally protect the River	Нові **водно-болотні угіддя** в Юеллі в графстві Суррей

	Hogsmill and ultimately the Thames from pollution, says the South East Rivers Trust.	природним чином захистять від забруднення річку Хогсмілл і, зрештою, Темзу, повідомляє екологічна організація South East Rivers Trust.
42.	The government has temporarily banned permits for new **incinerator plants** in England.	Уряд тимчасово заборонив видачу дозволів на нові **сміттєспалювальні заводи** в Англії.
43.	The NREL incinerator, which will burn **non-recyclable waste** to generate electricity, is due to be built on an industrial park in Westbury.	В промисловій зоні у Вестбері планують побудувати сміттєспалювальний завод компанії NREL, який спалюватиме **відходи, які не піддаються переробці,** для виробництва електроенергії.
44.	The last two **coal-fired power plants** in New England are set to close by 2025 and 2028, ending the use of a fossil fuel that supplied electricity to the region for more than 50 years.	В планах закрити останні дві **вугільні електростанції** в Новій Англії до 2025 і 2028 років, поклавши край використанню викопного палива, яке постачало електроенергію в регіон більше 50 років.
45.	After shutting down, the plants will be converted to **solar farms** and battery units that can store electricity generated from offshore **wind turbines** along the Atlantic Coast, the owner said.	За словами власника, після закриття заводи перетворять на **сонячні електростанції** та батареї, які зможуть зберігати електроенергію, вироблену морськими **вітровими турбінами**, розміщеними вздовж Атлантичного узбережжя.
46.	Coal use has dropped precipitously in the United States as **natural gas** and **renewable sources** like wind and solar have become less expensive.	Використання вугілля в Сполучених Штатах стрімко скоротилося, оскільки **природний газ** і **відновлювані джерела**, такі як вітер і сонце, стали дешевшими.
47.	The Biden administration on Monday finalized a ban on the only type of **asbestos** still used in the United	У понеділок адміністрація Байдена завершила документ про заборону на єдиний тип **азбесту,**

	States, the first time since 1989 the federal government has moved to significantly restrict the toxic industrial material.	який досі використовується в Сполучених Штатах. Вперше з 1989 року федеральний уряд суттєво обмежив використання токсичного промислового матеріалу.
48.	**Chrysotile** is the only raw form of asbestos known to be currently imported, processed or distributed for use in the United States.	**Хризотил** є єдиною необробленою формою азбесту, яка в даний час імпортується, переробляється або розповсюджується для використання в Сполучених Штатах.
49.	She said the agency did consider whether its original two-year time frame "could have resulted in extended closures of some of the facilities that make the chemicals that we need to **purify** our drinking water, and that's why we built in some extra time for the actual conversion of those facilities."	Вона сказала, що агентство розглянуло питання про те, чи дворічна дія цього закону «могла призвести до тривалого закриття деяких установ, які виробляють хімічні речовини, необхідні для **очищення** нашої питної води, і тому ми передбачили додатковий час для фактичного перетворення цих об'єктів».
50.	The Environmental Protection Agency is imposing new restrictions on the emissions of **ethylene oxide**, a colorless gas that is widely used to sterilize medical devices and is also a carcinogen.	Агентство з охорони навколишнього середовища вводить нові обмеження на викиди **етиленоксиду,** безбарвного газу, який широко використовується для стерилізації медичних приладів, а також є канцерогеном.

РЕЗЮМЕ

Курсову роботу присвячено дослідженню способів відтворення фахової термінології в галузі охорони навколишнього середовища з англійської мови на українську. У ході роботи висвітлено такий лінгвістичний феномен, як термінологію, описано існуючі способи перекладу термінів в галузі охорони навколишнього середовища в масмедійному дискурсі, проаналізовано зразок тексту масмедійного дискурсу і здійснено перекладацький аналіз фактичного матеріалу дослідження (термінів в галузі охорони навколишнього середовища, усього 50 одиниць). Крім того, в курсовій роботі міститься 3 діаграми, які містять можливі способи відтворення фахової термінології у зазначеній галузі.

Ключові слова: переклад, перекладацький аналіз, фахова термінологія в галузі охорони навколишнього середовища, терміни, масмедійний дискурс.