Е. А. Алешугина, Д. А. Лошкарева, Т. А. Саркисян

## ОБСУЖДАЕМ СОВРЕМЕННЫЕ ЭКОЛОГИЧЕСКИЕ ПРОБЛЕМЫ НА АНГЛИЙСКОМ ЯЗЫКЕ

Учебное пособие

Нижний Новгород 2017

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Ключевые слова: бакалавр, иностранный язык для научных и профессиональных целей, экология и природопользование, защита окружающей среды, вторичное производство.

Нацелено на формирование знаний по специальности и овладение профессионально-ориентированным и общенаучным английским языком. В пособии представлены аутентичные тексты общепрофессиональной направленности, а также разнообразные по форме и содержанию упражнения, основанные на активных технологиях обучения и направленных на активизацию изученного материала.

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#### **ВВЕДЕНИЕ**

Учебно-методическое пособие предназначено для обучающихся по дисциплине Б.1.03 «Иностранный язык направлению подготовки Н-05.03.06 Экология и природопользование профиль «Природопользование». Однако, в рамках изучения темы «Экология» на английском языке может быть использовано и на других направления подготовки. Пособие рекомендуется к использованию как для аудиторной, так и для самостоятельной работы студентов всех форм обучения.

В основе отбора содержания данного учебного пособия лежат научные разработки авторов – результаты двух диссертационных исследований [2,3].

Учебное пособие «Обсуждаем современные экологические проблемы на английском языке» помогает студентам подготовиться к будущей профессиональной деятельности. Оно, несомненно, закладывает основы для будущей работы с профессиональной литературой на английском языке.

Учебное пособие состоит из разделов, освещающих различные аспекты профессиональной и общенаучной сферы деятельности. Они, в свою очередь, имеют подразделы, а также дополнительный раздел «Supplementary Reading», предлагающий материалы для организации самостоятельной работы обучаемых. Содержание разделов актуально, отобрано с учетом рекомендаций специалистов профильной кафедры «Экология и природопользования» и отражает современное состояние проблемы. Контекст учебных материалов соответствует контексту специальности, что без сомнения положительно влияет на мотивацию и заинтересованность студентов в изучении профессионально ориентированного английского языка.

Учебное пособие также содержит ряд грамматических упражнений, направленных на разбор трудностей перевода научно-технического текста, кроме того в пособие включен ряд коммуникативных и творческих заданий.

Пособие направлено на развитие и совершенствование профессиональной иноязычной коммуникативной компетенции, приобретенной на предыдущей ступени образования, которая включает в себя способность эффектив-

но осуществлять общение на иностранном языке в общеразговорной сфере, а также работать с иноязычными источниками информации (осуществлять ее критический анализ, обсуждение, формировать собственное суждение о прочитанном). Кроме того, разработанные творческие задания направлены на стимулирование совместной работы, где каждый студент приобретает навыки социального взаимодействия, а также ценностные ориентации и установки, присущие специалисту.

Следует отметить стремление авторов расширить традиционные рамки подачи материала, о чем свидетельствует большое количество разноплановых заданий на развитие иноязычных коммуникативных умений, а также критического взгляда на проблему. Задания основаны на аутентичном текстовом материале, который содержит высокий процент профессиональной лексики, поскольку тексты заимствованы из оригинальных источников. Примечательным является то, что на основе текстового материала студенты вовлекаются в дискуссии профессионального характера на английском языке, что позволяет им демонстрировать наряду с языковой компетенцией собственный профессиональный опыт и специальные знания.

Учебное пособие графически оформлено рисунками и таблицами, а содержит специальный глоссарий в виде приложения.

Авторы выражают благодарность всему коллективу кафедры иностранных языков 1 ННГАСУ, рецензентам, преподавателям специальных кафедр ННГАСУ, студентам-магистрантам и аспирантам за помощь и ценные замечания в процессе подготовке данного пособия.

#### UINIT I

## PRESENT DAY ECOLOGICAL PROBLEMS: REASONS AND CONSE-QUENCES

I. Read this quotation and say in what way they are, or are not true

The nation that destroys its soil destroys itself.

Franklin D. Roosevelt

#### Text 1

- I. Read the text and be ready to answer the following questions:
  - 1. What is the main reason for the great environmental disbalance?
  - 2. What areas of the environment are endangered?
- II. Mind the pronunciation of the following international words. Give Russian equivalents with the same root if possible:

  delicate, interdependency, respiratory, balance, poisonous, civilization, climate, erosion, vibration, cause, chemical, substance, allergic, decade, associate, distraction.

#### **Endangered Environment**

Speak to the earth, and it will teach thee

Bible

All life in our planet exists in a delicate balance. There is a system of interdependency among plants, animals, insects and people living on earth. The planet supports various ecosystems in the air, water and land. Carelessly, we have hunted animals, insects, cut away forests and released poisonous waste and garbage into the environment. The poisoning of the world's land, air and water is the fast spreading disease of civilization. It is a more serious problem than local wars, earthquakes and floods. This is a great danger to human life on earth.

As a result of human interference the climate in the planet has changed. The Earth faces massive deforestation, the ozone layer destruction that causes greenhouse effect, acid rains and global warming of the climate, drastic droughts, floods, erosion of soil, formation of new deserts and etc.

The factors influencing the environment fall into some groups: noise, air pollution, water contamination, vibration that may cause harm to people and their property and soil pollution.

Rivers and seas are in danger. They are filled with poison; industrial and domestic wastes, chemical fertilizers and pesticides. Nuclear waste is being discharged into water as well.

The air pollution is also a serious problem. In some giant megapolices the air is a threat to life. Industrial enterprises and cars emit tons of harmful substances every hour. The air pollution is a dangerous factor to the health of people, animals and plants. Thus, in Tokyo, Cairo, for example, just breathing the air is dangerous for health. The same hold true for Mexico City and some other cosmopolitan cities.

Traffic noise is the most widely spread discomfort associated with road transport. Noise leads to stress. Stress in its turn causes chronic diseases of the respiratory and digestive tracks and the nervous system as well as allergic diseases.

If present trends continue for a several following decades, our planet will become uninhabitable.

Fortunately, people are beginning to realize that environmental problems are not somebody else's. They join and support various international organizations and "green parties", and perhaps, we will be able to avoid the disaster that threatens the whole world: all of our children and us.

# III. Find English equivalents to the following Russian words in the text and use them in your own sentences:

существовать, поддерживать, охотиться/истреблять, вырубать леса, выбрасывать вредные отходы в атмосферу, отравлять воздух, распространяться, сталкиваться с, влиять на, заполнять, угрожать, дышать, населять, осознавать, вступать в/присоединяться к, избегать, вмешиваться в законы природы, вызывать/быть причиной, всемирное (глобальное) потепление, наводнение, засуха, химические удобрения, загрязнение водоемов, экологический баланс.

## IV. Complete the table:

Verb	Noun
breath	
cause	
	danger
depend	
discharge	
	distraction
endanger	
emit	
	harm
influence	
inhabit	
interfere	
	pollution
realize	
	threat
	support

destroy	
associate	
begin	

## V. <u>Match the nouns with the adjectives and use them in your own sentences:</u>

Disease global

Problem local

War massive

Deforestation severe

Layer harmful

Rain ozone

Warming fast-spreading

Drought dangerous

Waste acid

megapolice serious

substance drastic

factor industrial

stress several

decades various

organizations giant

VI. Think how everyone can show their concern about the purity of our planet. What is your personal contribution to it? What dod you do to keep our planet clean?

VII. a) Look at the pictures (1-8) at pages 13-15 and comment on them. Say what ecological problems are matters of people concern nowadays.

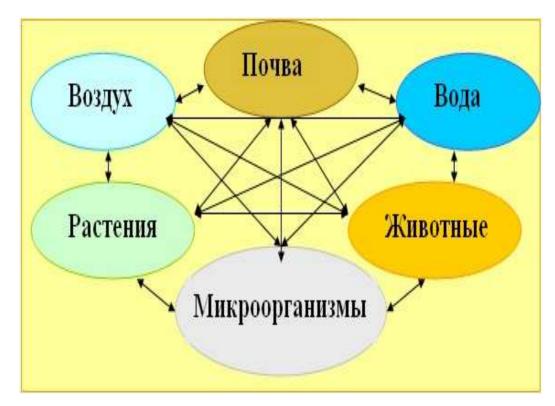
- b) Say what damage people have done to nature by treating the environment so badly.
- c) Do you know any places on the Earth that have been badly destroyed and where life has been killed as a result of man's activity?
- d) <u>Say how forests and rivers, soil and natural resources are valuable to us</u>.
- VIII. <u>Characterize the ecological situation of the area in which you live. Give</u> an example to show how man influences the environment in the area.
- IX. <u>Work in groups</u>. Describe your favourite place (seaside, mountains, a lake, a particular village and etc.) Why do you like it? What do you enjoy doing there? Speak about the ecological state. Exchange your ideas how to improve the situation.

#### X. Work in groups.

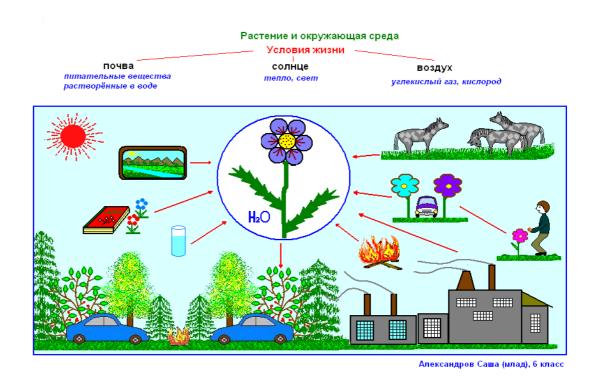
a) Prepare and make a presentation about ecological disasters of the planet. Use supplementary material on presenting the ideas at the end of the book (appendix 2).

#### Use the following plan:

- Introduction (what, where, when)
- Main body (reasons, casualties, distractions, measure taken, people involved)
- Conclusion (summarizing the ideas above)
- b) Get ready to be involved into the analysis of other presentations from different points of view. Use supplementary material on presenting the ideas at the end of the book (appendix 3).



Pic 1. Ecosystems



Pic 2. Ecosystems



Pic 3. Air pollution



Pic 4. Air pollution



Pic 5. Air pollution



Pic 6. Water contamination



Pic 6. Water contamination



Pic 7. Deforestation



Pic 8. The process of the environmental distraction

#### Text 2

- I. Read the text and be ready to answer the following questions:
  - 1. What are the main measures to save the environment?
  - 2. What areas of the environment need special attention?

# II. Mind the pronunciation of the following international words. Give Russian equivalents with the same root if possible:

lungs, primary, distraction, environmental concern, environmental protecting measures, poisoning of nature, encourage, raise public awareness, encourage, minimize waste, focus, ecological balance, conservation, electricity, mineral resources, industrial enterprises, emissions, electro mobiles and solar cars, methods, harmful exhaust, machinery, sewage water, dump, cooperate, remove, Tunnels, under ways and flyovers, philosophy, significant, improve.



Pic 9. Our precious Earth

#### **Traditional Methods of Environmental Control**

People must live in safe, healthy and favourable conditions. Every person should get gratification from natural resources. Ecological balance in nature should be preserved as well as variety and beauty.

Air, water and land pollution is a great problem of our time. We should tackle environmental problems and first of all control the pollution problem stopping the slow poisoning of nature and taking environmental protecting measures.

First of all we should focus on the main areas of environmental concern encouraging recycling that saves a lot of energy, material and money. Besides it is rather significant to raise public awareness of our need for trees as they are the lungs of the Earth [Pic.10]. The primary task that is being carried out in many cities is to encourage tree planting and conservation. Then, we should minimize waste and change from our consumer economy to a conserver one. For example, by reducing of energy consumption we are able to save gas, electricity, water and mineral resources.

A series of measures are being taken nowadays against the air pollution in big cities. Authorities and industrial enterprises protect the population from atmospheric discharged, factory fumes and noxious exhausts by installing filters in exhausts and providing enterprises with reliable purifying machinery which can help to reduce poisonous emissions. Moreover, houses should be built at a safe distance from factories not to endanger people. Tunnels, under ways and flyovers are built; green wave system of traffic is introduced. Cars do not stop at crossings that lead to reducing of harmful exhaust. We hope that the development of electro mobiles and solar cars will offer a key solution to the air pollution control problem.

Noise is another problem of big cities. Combatting with it is rather important. That is why authorities try to remove the building of new factories and highways out of towns equipping cars with improved exhaust silencers.

As for water supply much attention is being given to water protection. Industrial, household wastes and sewage water are dumped into reservoirs near cities. So, sewage and pollution control installations are built in cities.

In agriculture farmers are trying to apply new methods and forms of feeding the crops avoiding harmful fertilizers and pesticides. No chemical but vegetable forms of feeding are being applied. Franklin D Roosevelt once said, "The nation that destroys its soil destroys itself".

No doubt that all these measures and tasks are no easy to cope with. But we should realize that our resources are finite. We should take a unified action at a truly global level. If we manage to create a sustainable earth society based on a philosophy of people cooperating with nature we will be able to fight together against the destruction of nature. The first steps have already been done and the first results have been seen. The celebration of the United Nations World Environmental Day – June 5<sup>th</sup> – should be the world's action aimed at making people aware that they are a part of nature.

III. Work with the text. Make a list of environmental protection measures.Speak about each of them to the class.



Pic 10. Trees are the lung of the planet

IV. Say what environmental protection measures are being taken by your city authorities. Give examples. What else should be done from your point of view.

## V. Work in groups.

a) Prepare and make a presentation about protection of various endangers species of animals and plants. Use supplementary material on presenting the ideas at the end of the book (appendix 2).

## Use the following plan:

- Introduction (what, where, when)
- Main body (reasons, casualties, measure taken, people involved)
- Conclision (summarizing the ideas above)
- b) Get ready to be involved into the analysis of other presentations from different points of view. Use supplementary material on presenting the ideas at the end of the book (appendix 3).



Pic. 11 Our precious Earth

#### **UINIT II**

#### WASTE DISPOSAL

I. Read this quotation and say in what way they are, or are not true

Civilization is being poisoned by its own waste products.

William Ralph Inge

#### Text 1

- I. Read the text and be ready to answer the following questions:
  - 1. What does your family do with the rubbish?
  - 2. Do you have enough rubbish bins in the area where you live?
  - 3. Do you try to throw away less rubbish?
  - 4. What products are recycled in Russia?
- II. Mind the pronunciation of the following international words. Give Russian equivalents with the same root if possible:

rubbish, throw, metal, recycle, recyclable, stuff, useful, packaging, wrapping.

## Why Throw Away so Much?

Many countries bury and forget about millions of tons of rubbish every year. It is known that in one year, a European family with two children throws away about 50 kilos of paper (that's six trees), and about 60 kilos of plastic.

The Green World reports say that in one year the average person throws away: about 70 food cans, 34 cans of pet food and about 70 drink cans.

But we don't have to throw away all our waste paper, glass, metal and plastic. We can also burn or recycle a lot of it. In fact waste can be wonderful stuff.

Many things we throw away can still be useful. In fact it is possible to recycle 80% of domestic rubbish. We can recycle most kinds of paper, glass, metal

and plastic. But only 4% of recyclable material is actually recycled. Recycling has been always expensive. However it saves trees and energy and protects the environment from pollution [Pic.12-13].

#### **Packaging**

These days, people usually do the shopping in supermarkets. Nearly everything is packed in paper or plastic containers. Some of this "packaging" is demanded. It keeps food clean and fresh. But some packaging is unnecessary. It's just to make the food look better.

Every year in Britain each person produces 57 kilograms of plastic waste.

Disposing of all this plastic is an expensive problem. Bu that's not all. Producing plastic causes pollution.

Unfortunately, some of this packaging doesn't reach the bins. It becomes litter instead. Some people simply tear the wrapping off sweets and throw it away. They drop their cigarette packets and cans of drink without a thought.

In the tow streets their litter looks horrible. But fortunately someone clears it away. In the countryside, it remains in the fields and on the roadsides unless the people who live nearby pick it up. It can hurt or even kill farm animals. Bottles and cans cause cuts, and animals can eat polythene bags and die, or put their heads in them and suffocate.

#### III. Find words or word combinations in the text:

a) which have a similar meaning to the following:

litter; get rid of; to make; the packaging; to save; to damage; terrible

b) which have the opposite meaning to the following:

to look worse; impossible; cheap; to destroy; dirty; to remember; fortunately

## IV. Answer the following questions:

- 1. What can people do with rubbish instead of just throwing it away?
- 2. Why is recycling important nowadays?
- 3. How much of recyclable material is actually recycled? Why so little?

- 4. Are there recycling centers in the place where you live? What do people usually take there?
- 5. Is packaging necessary? Why?
- 6. Why does some packaging become litter?
- 7. Why is litter so dangerous in the countryside?
- 8. Is litter a big problem in the place where you live? Do you take part in a 'clean-up day' that is sometimes arranges in big cities? Why or why not?

#### V. Complete the sentences.

- 1. If people thought about the Earth before they throw something away,....
- 2. If people took as much rubbish as they could to the local recycling centers,....
- 3. If people avoided buying packaged goods, .....
- 4. If people didn't waste paper, ....
- 5. If people didn't drop litter,.....
- 6. If people cleared up litter outside their home, offices and schools, ....



Pic 12. This sign means that the thing is made from recycled materials



Pic 13. This sign means that the thing can be recycled

#### Text 2

- I. Read the text and be ready to answer the following questions:
  - 5. Is garbage disposal a problem in your city?
  - 6. How is garbage disposal handled in your country?
  - 7. How many different forms of garbage disposal are used?
- II. Mind the pronunciation of the following international words. Give Russian equivalents with the same root if possible:
  schedule, garbage disposal, trash, landfill, recycling, reused, fertilizer, combustible, noncombustible, item, category, battery, fluorescent lights, aluminum.



Pic 14. Garbage Disposal

#### Waste not, Want not

Disposing of the garbage we produce every day is a major problem in cities all over the world. Only ten percent of the wastes are usually recycled, another ten percent is burnt and the rest is put in landfills [Pic.15]. But to find land for new landfills is becoming more and more difficult.

Recycling is a very important subject and one that is becoming more and more all the time. As we all know, it reduces waste and is good for the environment. But what do recycling centers do with the things we throw away?

The city if Tokyo, Japan, can be an example of solving the problem of waste [Pic.16-17]. Other cities worldwide follow its example. It has developed a totally new approach to garbage disposal: families must divide their garbage into six categories:

- 1. Garbage that can be easily burnt (paper, wooden things, garden trash, etc.);
- 2. Noncombustible garbage (plastic bottles and toys, small electric appliances, etc.);

- 3. Products that are poisonous or that cause pollution (batteries, fluorescent lights, etc.);
- 4. Things that can be recycled (glass bottles, paper, etc.)
- 5. Metal containers (iron and steel tools, etc.) which can be recycled;
- 6. Large items such as furniture, old bicycles, cars, etc.

Items of different categories are collected on different days according to the schedule.

Almost everything can be reused: garden and kitchen trash becomes fertilizer; combustible garbage is burnt to produce heat and electricity; metal containers, clothing and other useful things are cleaned, repaired and sold again cheaply or even given out to people who need them.

Recycling <u>paper</u> has been the biggest success. In 1990, in the USA, more than 20 million tons of paper were recycled and turned into birthday cards, cereal boxes and hundreds of other things. Paper is the easiest material to recycle.

<u>Plastic</u> is the hardest material to recycle because there are many different kinds of it and all of them need to be treated differently. Unfortunately, at the moment only two percent of all the plastic used is recycled. But is has its application: one company uses plastic from recycled car headlights to make windows; another company uses plastic to make carpets and rugs.

<u>Metal</u> is another important material. It is easier to recycle an aluminum can than to produce a new one. As many things we use are made of metal they all can be reused after they stop working. There is also very little waste involved in recycling metal.

Glass can also be recycled and used for a number of things. It can be melted down and used to make new bottles [Pic.18].

Special recycling plants with demanded equipment have been built in Japan and other countries [Pic. 19]. Such plants look like a clean new office building or even a hospital. So, remember and think before throwing away old stuff – it can be still useful. If we all make an effort to recycle we can make the planet a cleaner place to live.



Pic 15. A Landfill



Pic 16. Categories of Garbage



Pic 17. Categories of Garbage



Pic.18. The table of recyclable and non-recyclable things



Pic 19. A Recycling Plant

## III. Which of the six categories above would these items be placed in?

- Old newspapers
- A bed
- Soda and beer cans
- Acid and chemicals
- Old chinaware (plates, cups, etc.)
- A tyre

## IV. What happened to these things in the garbage disposal center?

- A carpet
- Car tyres
- An old colour TV
- Out-of-date food and vegetables (from supermarkets, for example)

#### V. <u>Identify groups of synonyms</u>:

Treat, garbage, decrease, purify, possessions, use, utilize, rubbish, belongings, littr, wastes, debris, things, items, stuff, clean, remove, reduce, discharge, release, depollute, dispose, apply.

## VI. <u>Make up a new word using prefix *re-* and think of more examples</u> use, move, cycle, write.....

#### VII. Find the odd word

- paper, metal, plastic, furniture, iron, steel;
- paper, glass bottle, wooden things, garden trash;
- plant, factory, enterprise, works, landfills;
- equipment, tools, installations, electric appliances, containers.

#### VIII. Make the following sentences passive:

- 1. People usually recycle burn or put the wastes they produce in landfills.
- 2. We can reuse almost everything.
- 3. In 1990 the USA recycled more than 20 million tons of paper and turned it into birthday cards, cereal boxes and hundreds of other things.
- 4. People collect items of different categories indifferent ways.
- 5. Specialists melt down glass and use it to produce new bottles.
- 6. Japanese and Americans have recently built recycling plants with special equipment.

IX.	Find prepositions to fill in the gaps. Use these prepositional phrases in
	your own sentences:
	1. Accordingschedule
	2. To putlandfills
	3. To be goodenvironment
	4. To throwthings
	5. Approachsomething
	6. To be mademetal
	7. To involverecycling
X.	a) Look at the list of the world problems below. Choose six that are burn
	ing (a) in your country and (b) worldwide. Then rank them from 1 to 12
	giving comments to the class.
	• corruption;
	• crime;
	• drugs;
	<ul> <li>medical costs;</li> </ul>
	• noise;
	• pollution;
	• poverty;
	• starvation;
	• public housing;
	• traffic;
	<ul><li>unemployment;</li></ul>
	<ul><li>vandalism.</li></ul>
	- rangungin.

b) Compare your lists. What can we do to solve these problems?

	c) What are three other acute problems (a) in your country and (b) worldwide?
XI.	Take turns to discuss the topics below. Make use of the following phras-
	<u>es</u> :
	• That's a good point
	• Yes, I agree with you
	• That's true, but
	• Maybe you are right, but
	• Well, I disagree because
	• First of all
	• Another thing is
	• Also
	• In addition
	• What do you think about?
	• Oh, I think it's a good/reasonable idea because
	• Yes, I agree. We should
	• Well, I don't think it's necessary because
	• From my point of view
	• In my opinion
	• As I see the problem
	• To my mind
	Moreover
	• Besides
	• Furthermore
	• To sum up
	• In conclusion it is necessary to say that
	• Finally

- At last.....
- To draw a conclusion.....

## **Topics to discuss**:

- 1. It is obligatory to make all companies to recycle their waste.
- 2. The problem of recycling centers construction in your city/town.
- 3. Sorting the waste we throw away.
- 4. Following positive recycling examples of other countries.

## XII. Role play.

Get ready to discuss the problem of garbage disposal and sorting at the meeting of your neighbourhood residence.

- a) Study the problem thoroughly.
- b) Make a list of questions you would ask the authorities.

#### **UINIT III**

#### METHODS OF CONTROLLING THE ENVIRONMENTAL POLLUTION

#### Text 1

- I. Read the text and be ready to answer the following questions:
  - 1. What is the main reason for the invention of new methods of controlling the environmental pollution?
  - 2. What traditional methods of controlling environmental control do you remember?
- II. Mind the pronunciation of the following international words. Give Russian equivalents with the same root if possible:

  major threat, chimney, coal fires, weapons, sulphureous coal, environmental legislation, severe chest problems, industrialize, remote systems, immortalize, ultra-red rays, cough, carbon-hydrogen types of gas, suspended gas, pulsing razor light, technological equipment, concentration of the gas, chlorine-fluorine-carbon group, be mounted.
- III. Read the text carefully looking up the words you do not understand.

### **New Methods of Controlling the Environmental Pollution in the UK**

Pollution of the air, water and land now forms a major threat to the quality of life in the planet. What are the new weapons being forced by British industry to fight it?

The quality of the air in London on a winter day is a tribute to the Britain's long war with pollution. Looking along the Thames as it flows through the city it is hard to remember that it was once a place famous for its fog. Bug thick smoke from coal fires and factory chimneys was known as smog among Londoners themselves. It made people cough and could kill several hundred people in a bad year.

The smog immortalized in Charles Dickens's novels still envelops London in imagination of people in the rest of the world. But London's black fog has in reality being swept away by legislation. The British parliament in 1956 banned the burning of sulphureous coal for heating and in power stations as it had led to regular built up of smog in London. Now despite the huge increase of traffic the air is a lot cleaner and the rate of severe chest problems from pollution is well done. It is all a different picture compared to the days before the "Clean Air Act". However, environmental legislation goes back to much further than 1950-s in Britain.

The UK was the country to industrialize and because of that it had a big problem with pollution. The land had been contaminated; rivers and the air had been polluted too. But because of all of this pollution the UK was among the first countries in the world who has introduced the environmental law, thus, all of these effects on the environment and on public health made the legislation lead to environmental technology followed. In a continuing struggle for clean air it was necessary to find new means to control it. In this struggle it is important to keep watching at the sources of pollution. The task is

Previous situation

Londoners breath clean air

Legislation against the pollution

more difficult than it sounds.

In refinery-oil and petrol chemical plants, for instance, any chimney or joints in pipes may be a source of pollution. To check whether they do it or not is a complex and expensive job. British National Physical Laboratory (NPL) has developed two remote systems to do that job. One of them using ultra-red rays is portable and not expensive, yet highly accurate. For more complex monitoring jobs NPL scientists and engineers have put together a different system. It is housed in a lorry trailer with a large telescope mounted in its back side. The trailer is packed with special highly technological equipment but needs only a couple of people to operate it. The system works by means of pulsing razor light that notices pollutants or suspended gas inside the object. Razor light shows the concentration of the gas and its escapes. Actions to stop the escapes benefit plant efficiency as well as the environment. The NPL system is the only one in the world which is capable of revealing all carbon-hydrogen types of gas ejected into the air by refinery-oil and petrol chemical plants. Now the equipment is bought by different countries.

......In 1980-s scientists began to observe the development of the ozone layer trying to reveal the changes that may be harmful to the planet. The reason of the thinning of the ozone layer lies upon the chemicals of chlorine-fluorine-carbon (CFC) group. One of them has been the key substance in cooling fuel that is used in fridges and in conditioning systems. People throughout

Air pollution control

the world have for years relied on it to keep food from going bad. But when fridges and conditioning systems go wrong CFC gas can be released into the atmosphere. More than that, this gas is also used in fire-extinguishers and aerosols. When in the atmosphere it prevents the ozone layer from renewing itself and does not allow ozone into the air. Thus, scientists began to find substitutes to replace CFC gas. ISI company carried out research work to do this job. The substitute was discovered and called CLEAR 134-A. It was produced in 1992 to replace CFC in fridges and in conditioning systems. The research work is being continued at present to find better substitutes. New chemicals of CLEAR group are aimed at saving the ozone layer.

The UK has also taken special steps to improve the situation with soil pollution. One of the leading companies in this field in Britain is called Byital. Instead of cutting out infected layers of the land it tries to eliminate the infection itself. The method of bio-recovering based on the application of bacteria and microorganisms is widely used. Bacteria and microorganisms abolish the infection. They even may cope with a wide range of contaminants from oil dioxins.

Nuclear pollutants are also very dangerous as they are threat to life on earth. Nuclear fuel is purified in special plants. The system of complete management of nuclear fuel is applied here. The extraction of uranium leads to safety. Liquid is hated in the oven till it turns into granules containing highly active waste. Then they are

The ozone layer depletion

Elimination of soil infection

mixed with the granules of special material for glass production. After that the mixture is cooled and radioactive waste is hardened in glass. There are also 5 plants in Great Britain that work on purifying water from nuclear elements. It is a process of ultra-filtration carried out at several stages.

The first method of biological treatment of sewage water was invented in Manchester. Microorganisms applied are put into a special plastic board in special radiators. Microorganisms are kept in water till the pollutant comes to the bottom and becomes precipitation.

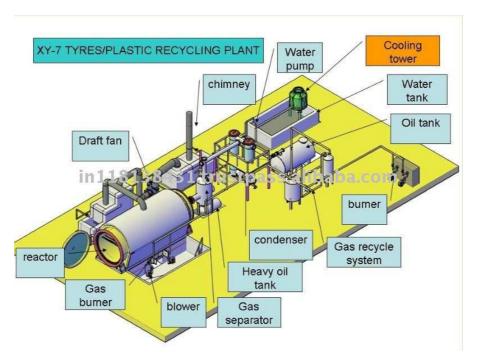
There are also some methods aimed at recycling plastic which is widely used in a number of fields. Plastic belongs to one of the most difficult to recycle types of waste. Besides, mechanically renovated plastic is no good to be used as food package. That is why British Petroleum decided to carry out research aimed at discovering new methods of recycling plastic. According to the new technology plastic is split into material used in oil-refinery plants. Then carbon-hydrogen gas is partly condensed into wax. Then it is mixed with secondary oil products. The received mixture is heated (600 C) and plastic is turned into carbon-hydrogen gas. Metal used to produce plastic is left behind [Pic. 20].

British people are proud of their achievements. Almost over 200 years environmental technologies are applied in the UK. It also exports the technologies abroad and has become the world leading exporter of purifying systems.

Nuclear treatment

Methods of sewage water treatment

Recycling of plastic



Pic. 20. Recycling of Plastic

# IV. <u>Check your understanding of the text. Are the following statements true</u> or false?

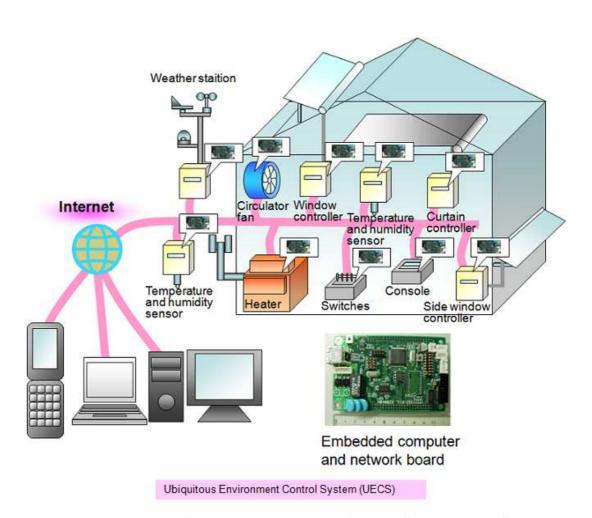
- 1. The UK is developing new technologies concerning the air pollution.
- 2. The smog over London was harmful to people's health.
- 3. The UK was among the first countries to tackle the problem of the environment.
- 4. Remote gas sensing systems are based on razor application.
- 5. The NPL systems are capable of eliminating carbon-hydrogen gas.
- 6. Chemicals of CLEAR group were developed to substitute CFC gas.
- 7. Bacteria and microorganisms are used in the method of biorecovering.
- 8. Renovated plastic can be widely used in many fields.
- 9. British technologies nowadays are spread all over the world.

### V. Extend the idea.

- 1. The British Parliament in 1952 banned the burning of sulphureous coal for heating and in power stations.
- 2. The UK was among the first countries to introduce the environmental law.
- 3. British National Laboratory has developed two remote gas sensing systems.
- 4. CFC gas disrupts the ozone layer.
- 5. The UK has taken special steps to improve the situation with land pollution.
- 6. Nuclear fuel is purified in special plants in the UK.
- 7. Britain was the first country to develop the method of sewage water treatment.
- 8. It is rather difficult to recycle plastic.
- VI. Sum up what you have learnt about environmental technologies in the UK. Use the notes on the margins as the key points.

### VII. Role play.

Some of you are reporters from different countries at a press conference at the Ministry of Environmental Affairs. Interview the Minister and the scientists from NPL concerning new environmental technologies introduced in Great Britain. Discuss the possible ways of their application in your countries.



Pic. 21. Widely Spread Environmental Control Systems (UECS)

### SUPPLEMENTARY MATERIAL

# МАТЕРИАЛЫ ДЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУ-ДЕНТОВ

### Part I

### Rainforests and the Global Balance of Nature

The wonders of the rainforests [Pic.22] do not end with their abundance and variety of plant, animal and insect forms of life. They support the overall balance of nature in the planet. Rain forests protect the watersheds that are directly connected with the survival of 40% of the world's farms. A watershed is a well forested can trap 95% of the annual rainfall on Earth. This prevents flooding and keeps streams running.

Rain patterns are linked with the processes of the tropic jungles. About half of the rainfall is returned to the atmosphere via evaporation – a process that transfers water into the atmosphere from soil and plants. Carries by the wind the moisture falls as rain thousands of miles away. If jungles and rain forests of the Amazon and Central Panama regions were cleaned from the forests, enormous area suffer from lack of water and new deserts will appear even in Europe. Because rainforests store vast reserves of carbon in their vegetation, burning them releases significant amounts of carbon dioxide into the atmosphere. That is a serious factor leading to the greenhouse effect. Deforestation should have a limit.



Pic. 22. The Amazon Rainforest

### Part II

### **Changing the Environment**

### I. Task:

You are concerned about the environment and increasing level of pollution. This time you should act as directors of a small company and make contributions to solving the problem of nature.

### Work in small groups.

1. You have introduced a company suggestion scheme and collected the proposals from your staff. Hold a meeting to decide what to do with each of the ideas. You can implement them at once, dismiss them or investigate the ideas further. If you decide to implement the proposal or investigate it further, plan what to do and decide who will be responsible and what resources they will need.

### **Useful phrases:**

- I'll do that if you like
- Shall I do it or you will?
- I'll leave that to you
- I'll need.....

### **Proposals to improve the situation:**

- 1. Take away all company cars.
- 2. Chang the company's fleet of lorries. Replace them with new models that are more economical on fuel.
- 3. Encourage staff to work from home. Telecommunications can substitute for commuting to the office.

- 4. Instead of working 5 eight-hour days each week, work 4 ten-hour days. A three-day weekend will reduce the factory's heating costs.
- 5. Install solar cells in the roof to collect sunlight to heat the offices.
- 6. Put less packaging on the products. Tell the suppliers to provide less packaging with their products.
- 7. Plant trees in the garden to stabilize the soil, conserve water resources and 'fix' carbon dioxide to help slow the pace of global warming.
- 8. Ban all office memos to save paper.
- 9. Collect all waste paper from offices at the end of each day and send it for recycling.
- 10.Sell only vegetarian food at the company canteen.
- 11. Make contribution from the company's profits to the Green Party.
- 12.Impose fines on those who pollute the environment.
- II. You would like to award a prize to the staff member who offered the best suggestion. Decide which one is the best.
- III. Compare your decisions with the colleagues' from the other groups.Find out which proposals they choose to implement and why.

### Part III

### **Environmental Studies: the Future**

I. Read the letters from *Magazine 2090*. Comment on the opinions expressed.

### The first letter:

# From John Andrews, Cambridge, 20th February 2090

I read the article last week that compared life in the 1990s with life today. The writer thought that family life then was better than it is now. I don't agree. I think life today is much better than it used to be.

Our environment is a lot cleaner now. In the 1990s there was a lot of pollution from old-fashioned petrol driven cars. Services, such as gas and electricity, were incredibly expensive and 5the Earth limited resources were used too quickly. In the 20<sup>th</sup> century people didn't recycle their waste stuff properly which caused even more pollution.

Life is too much easier and more convenient nowadays.80-90 years ago people didn't have domestic robots, for example. My grandparents had to do all their own housework! And there were no 'smart card' machines in their homes. Today, we can order everything by using our cards, but last century people had to go shopping themselves. What a waste of time! In my opinion, we're much better off now.

### John Andrews

**PS** And as a result of European Union decision in 2051 to retire people at the age of 40, families have a lot more leisure time.

### The second letter:

### From Teresa Campos, Buenos-Aires, 20th February 2090

I read the article last week that compared life in the 1990s with life today. The writer thought that family life then was better than it is now. I agree with him. I think life *was* better then.

In the 1990s people were happier and life was easier. I can think of two things people used to do then and that they don't do now. One thing is that people used to eat proper food and had their meals together. It isn't like that now. Everyone eats on his own and people don't have proper food. They only have food tablets.

Another thing is that people used to spend more time with their families. Today family life has changed a lot and people don't live so close to their relatives. I often think about my grandparents who were alive in 1990s. My granddad had a lovely big car. It was a Mercedes, but now we are not allowed to have cars. When my grandparents had a car my grandma loved to go out shopping. But people don't do that nowadays. They stay at home and buy everything they need over the phone. In fact, these days people don't go out much at all. That's because they surf the Net too much and spend time with their mobiles.

Yet life has changed a lot since 1990s. The real change came in the year 2060 when all the world governments decided that we must not have private cars any more. Since then life has become more difficult and less pleasant. I wish I lived in 2000s like my grandparents.

**Teresa Campos** 

- II. What's your opinion? In groups compare life in the 20<sup>th</sup> century to the life in 2090s. Do you think these things will happen in the next 70 years? Justify your point of view.
  - There will be another world war.
  - People will build cities in space.
  - The world will become much hotter.
  - We will look after the environment properly.
  - The population of the world will get smaller.
  - Scientists will find a cure for cancer and other incurable before diseases.
  - People will drive electric cars.
  - The rainforests will all be cut down.
- III. Now make some other predictions using I'm sure, I don't know if, I don't think....

#### **Part IV**

### **Environmental Economics**

Different countries face numerous challenges as they seek to achieve development that is economically, socially and environmentally sustainable.

Sustainable development is defined as that which meets the needs of the present without compromising the ability of future generations to meet their own needs. Economic development and environmental well-being are not mutually exclusive goals.

A key to environmentally sustainable development is economic instruments for environmental policies.

The basic types of economic instruments include:

- Pollution charges, fees and taxes
- Deposit-refund systems (залогово-возвратные системы)
- Pollution permit trading programs
- Subsides
- Liability insurance
- Voluntary Pollution Reduction Programs

Such a diversity of economics allows applying them to specific environmental problems. They are particularly useful for small and geographically dispersed sources. Economic instruments provide cost savings relative to traditional regulatory approaches.

Pollution charges are fees or taxes imposed on polluters based on the quantity of pollutants that are discharged into the environment. Ideally, sources would pay for each unit of pollution they emit.

A user charge is a fee paid in exchange for the use of natural resources or for the collection or disposal of pollutants.

Pollution charges give producers or consumers incentives to reduce polluting behavior. These charges discourage undesirable activities that have external costs. They force businesses and consumers to pay for the health and environmental technological innovation as polluters look to cut pollution and its costs. Revenues from environmental taxes and charges can be used for financing different government programs to support priority environmental projects.

A good approach for resolving environmental issues is to make polluters liable for the damage of their pollution causes.

The purpose of liability mechanisms in environmental management is twofold: first, to give polluters an economic incentive to make more careful decisions; and secondly, to compensate the victims of pollutions.

Liability payments are payments made under civil law to compensate for the damage caused by a polluting activity.

Avoiding harm to the environment helps companies to reduce the overall cost of doing business. This encourages companies to buy insurance to cover the costs of potential damages and provides incentives to reduce releases of pollutants onto the environment.

Liability insurance can be used for many types of pollution problems.

#### Part V

### **A Matter of Opinion**

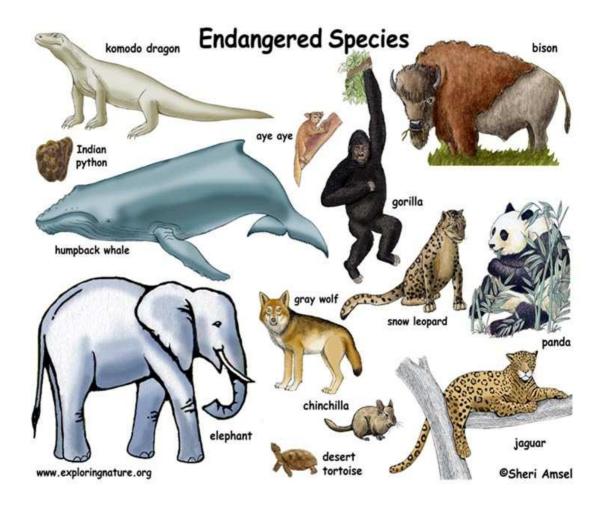
### I. Task:

A wildlife magazine has invited readers to write articles discussing this question: "Should we create more national parks to save endangered species?" [Pic.23] Write an **article** for the magazine, giving your opinion and justifying your point of view.

- 1. What is a national park?
- 2. How many endangered species can you name? Why are they endangered? What can we do to protect them?
- 3. What *must* be included in this article?
  - the pros and cons of national parks;
  - your opinion and viewpoints with examples to support your opinion;
  - suggestions of several other ways we can protect endangered species.
- 4. Who is going to read your composition?
- 5. What style of writing will you use?
- 6. What tenses will you use?

# II. Which of these phrases would you expect to have in the article?

- are in real danger of becoming extinct
- protect the animals' natural habitat
- oppose/ be in favour of creation of national parks
- live in safety in the natural environment
- are wiped out from their natural habitat
- get help and support
- breed in captivity



Pic.23. Endangered Species

## III. Read the article.

- a) Label the paragraphs with the following headings:
  - Writer's arguments and justification
  - Summary of the writer's opinion
  - Introduction and statement of opinion
  - Opposing argument(s) and justification
- b) Replace the words in bold with their synonyms from the list:

  first of all furthermore in conclusion however for instance

# **Should We Create More national Parks to Save Endangered Species**

	Don't you find it warming that more and more	
	Don't you find it worrying that more and more	
	species of animals are in real danger of becoming ex-	Para 1
Introduction	tinct? I personally believe that we must save those	
	animals, and the best way to do this is for govern-	
	ments to create more national parks.	
	To begin with, national parks protect animals'	
	natural habitat. If the habitat is destroyed, for exam-	
	<b>ple</b> , when farmers clear jungle areas for new fields or	
	trees are cut down by logging companies any ani-	
	mals are unable to survive, and more species are	Para 2+3
	threatened with extinction.	
	In addition, natural parks protect the animals	
Main body	from the danger of being hunted. A major reason	
	why many species are endangered is that the animals	
	are killed by hunters for their skins, horns and so on,	
	or even simply for sport.	Para 4
	On the other hand, some people oppose the	
	creation of national parks because they consider it	
	wrong to interfere with nature. They claim that wild	
	animals are happier living in their natural habitat de-	
	spite dangers they face. They also point out that a	
	few species are more likely to breed in the wild than	Para 5
	in captivity.	1 ala 3
	All in all, though, these drawbacks are far less	
Conclusion	important than the benefits of national parks. Such	
	parks allow animals to live ion safety in their natural	
	The state of the s	

environment by protecting them from their greatest enemy – humans.

- c) Read the article again and answer the questions:
  - 1. What is the author's opinion about national parks creation?
  - 2. According to the article, what are the main ways national parks protect endangered species?
  - 3. Why do some people oppose the idea of national parks creation? What reasons are given to support this opposing point of view?
  - 4. What is the writer's opinion about the disadvantages of national parks?
- IV. Fill in the prepositions, then make sentences using the complete phrases:

by, on, in, with, of

- 1. be ..... danger ..... something
- 2. killed ...... Hunters
- 3. ..... the wild
- 4. Interfere ..... something
- 5. live ..... safety
- 6. .... the other hand
- 7. .... captivity
- 8. ..... Something
- V. <u>Underline the phrases used to give examples</u>.
  - 1. Hunting is forbidden in protected areas such as national parks.
  - 2. For example, in some countries it is illegal to hunt endangered species.
  - 3. One example of human cruelty to animals is our use of animals in scientific experiments.
  - 4. For instance, many animals do not breed in captivity.

VI. Write an article giving your opinion on the subject and justifying your point of view. Divide it into paragraphs and don't forget to use linking words (Appendix 1).

### **Topic:**

"Should we create more zoos to save endangered species?"

# Plan:

### Introduction

Paragraph 1 introduce the subject and state your opinion clearly

## **Main Body**

Paragraph 2	your viewpoints and justifications (1)
Paragraph 3	your viewpoints and justifications (2)
Paragraph 4	opposing viewpoint and justification

### **Conclusion**

Paragraph 5 restate your opinion

# APPENDIX 1

# **Useful Words/Phrases for Successful Communication**

Personal opi-	in my opinion/view	
nion	to my mind	
	from my point of view	
	to my way of thinking	
	I am convinced that	
	it strikes me that	
	it is my firm belief that	
	I am inclined to believe that	
	it seems to me that	
	as far as I am concerned	
	I think that	
To list advan-	one advantage of	
tages and dis-	another advantage of	
advantages	one other advantage of	
	a further advantage of	
	the main advantage of	
	the greatest advantage of	
	the first advantage of	
To list points	firstly	
	first of all	
	in the first place	
	secondly	
	thirdly	
	finally	

	to start/to begin with	
To list points	first/to start/to begin with/first of all	
to a specific	secondly/after this (that)/afterwards/then/next	
sequence	finally/lastly/last but not the least	
To add more	what is more	
points to the	furthermore	
same topic	also	
	moreover	
	apart from this/that	
	in addition (to this/that)	
	besides (this)	
	not to mention the fact that	
	not onlybut	
	bothand	
To refer to oth-	with reference to	
er sources	according to	
To express	because	
cause	owing to the fact that	
	due to the fact that	
	on the grounds that	
	since	
	as	
	in view of	
	because of	
	owing to	
	for this reason	
	seeing that	
	that	

To express ef-	thus
fect	therefore
	SO
	consequently
	as a result
	as a consequence
To express	so that
purpose	so as to/in order to
	in case
	with the purpose/view/intention of
To emphasize a	indeed
point	naturally
	clearly
	obviously
	of course
	needless to say
To express re-	it a fact that
ality	in effect
	in fact
	as a matter of fact
	actually
	in practice
	indeed
To give exam-	for instance,
ples	for example,
	such as
	like
	particularly
	in particular

	especially	
To make gen-	as a (general) rule,	
eral statements	by and large	
	generally,	
	in general,	
	on the whole	
To make par-	up to the point,	
tially true	to a certain extent/degree	·,··
statements	in a sense,	
	to a limited extent,	
	in a way,	
To express li-	to the best of my knowledge	
mited know-	as far as I know	
ledge		
To state other	it is popularly believed that	
people's opi-	people often claim that	
nions	it is often alleged that	
	some people argue that	
	many argue that	
	most people feel that	
	some people point out that	
	contrary to this belief,	
To make con-	yet	although
trasting points	however	even though
	nevertheless	regardless of the fact that
	nonetheless	in spite of the fact that
	but	despite the fact that
	even so	while
	still	on the contrary

	on the other hand
To express	opponents ofargue (claim, believe) that
balance (the	while it is true to say that, in fact
other side of	the fact thatcontradicts the belief (the idea) that
the argument)	
Negative addi-	neither nor
tion	nor
	neither
	either
To express ex-	apart from
ception	but
	except (for)
To clari-	in other words
fy/rephrase	that is to say
	to put it another way

Использованы материалы из [5, С. 91-93]

# APPENDIX 2

# **Words/Phrases for Presentations**

Introducing	Let me introduce myself. My name is
yourself	I would like to tell you about
Outlining a	I am going to divide my talk into four parts.
presentation	First I'll give you some basic information about
	After that I'll talk about
	Next, I want to look at
	Finally, I'll
	T211 -2
Giving back-	I'll give you some background information about
ground infor-	Let's start with the background.
mation	
Referring to	As you know
the audience	As you can see
Changing the	Let's now move on to
topic	Now I'll look at
Referring to	If you look at the graph you can see
visuals	Could I draw your attention to the chart?
. 12 4415	If you look at the table you'll see
	ii you look at the table you ii see
Endina	Thank you you much for your attention
Ending	Thank you very much for your attention.
	Thanks very much for listening to my talk.

Inviting ques-	If you have any questions, don't hesitate to ask.
tions	I'll be glad to answer any questions.

Использованы материалы из [4, С. 91-93]

# APPENDIX 3

# Six Hats of Thinking

# **Useful lexis**

job task	профессиональная задача
to cover significant professional issues	освещать важные профессиональные
	вопросы
to deliver a speech like professionals	выступать как профессионалы
to raise an important professional issue	поднять важный профессиональный
	вопрос
to cover all the points of the presenta-	раскрыть все пункты презентации
tion	
to touch upon the topical issues	затрагивать актуальные проблемы
to get message across to	донести свои мысли до
to come apart with	расходиться с
to specify the blind sides	указать на слабые стороны
to specificate	детализировать
to ignore	не учитывать, не включить
to overlook	упускать из виду, игнорировать
to torpedo a project	провалить проект
to speak by the book	говорить с полным знанием дела
unconsidered issue	нерассмотренный вопрос
to have an obscure view of	неясно представлять себе
to introduce / make changes in	вносить изменения в

# Useful words and word-combinations, questions and phrases

### THE WHITE HAT gives factual information about the presentation.

- 1. What was the subject of the presentation?
- 2. How long did it last?
- 3. How many parts did it consist of?
- 4. Was it computer or paper presentation?
- 5. Was it coloured or black-white?
- 6. Was it joined or single-handed work?
- 7. How many people took part in the presentation?

### THE YELLOW HAT states positive points of the presentation.

- 1. to manage to develop a successful professional report;
- 2. to cope with the job task professionally;
- 3. to do something in the original professional way;
- 4. to express one's own professional view concerning;
- 5. to cover significant professional issues;
- 6. to professional knowledge/skills;
- 7. to deliver a speech like professionals (выступать как);
- 8. to raise important professional issues;
- 9. to cover all the points of the presentation;
- 10. to be rich in professional lexis;
- 11. to be worthy of special attention;
- 12. well-prepared, thought-provoking, informative, cognitive, thought-out;
- 13. to touch upon the topical issues;
- 14. to manage to develop a professional detail project;
- 12. to hold a special place;

- 13. to get message across to;
- 14. It is painstaking work (Это кропотливый труд);
  - 15. It is of great interest to us.
- 16. It aroused our professional interest ...
- 17. Your presentation is beyond comparison/words.
- 18. According to your point of view...

### THE BLACK HAT states negative points of the presentation.

- 1. to fail to develop design concept;
- 2. sloppy and sketchy work небрежная и поверхностная работа;
- 3. ill-considered (необдуманный); unsuccessful; confusing moment;
- 4. limited professional lexis;
- 5. to fail professional knowledge and skills;
- 6. to come apart with design requirements;
- 7. to specify the blind sides;
- 8. to fail to represent the graphical part;
- 9. to fail to specify selection of needed materials;
- 10. to leave out cost of works;
- 11. to communicate thoughts clearly;
- 12. to overlook the main project parts;
- 13.to torpedo a project;
- 14. to get message across to;
- 15. to have an obscure view of;
- 16. Your presentation failed.
- 17. Your report leaves much to be desired.
- 18. You failed to cover all the points of the presentation.

### THE RED HAT expresses all the feelings which the presentation arouses.

- 1. experience different/ contradictory feelings;
- 2. to create a feeling of surprise/admiration/disappointment— вызывать чувство удивления/восхищения/разочарования;
- 3. to arouse a professional interest;
- 4. to put into a business-like mood;
- 5. to have the personal touch;
- 6. to get to like the project;
- 1. I fail words to express my respect for your professional skills/ professionalism.
- 2. There was a disappointing/confusing moment.
- 3. There was a moment that gladdened us very much.
- 4. You speak by the book.

### THE GREEN HAT suggests constructive ways to improve the presentation.

- 1. to improve considerably;
- 2. to make it more professional;
- 3. to specificate the project summary;
- 4. to meet requirements;
- 5. to analyse the building location;
- 6.to add building floor plans;
- 7. to specificate building materials;
- 8. I would suggest (doing) ...

**THE BLUE HAT** generalizes the points of view of all the hats and expresses the overall impression of the presentation.

1. to create a favourable/unfavourable impression;

- 2. to develop a successful project;
- 3. to fail to consider siting and site analysis;
- 4. to create a feeling of admiration;
- 5. to improve considerably and add unconsidered issues.

Использованы материалы из [13, С. 91-93]

### THE MINI- DICTIONARY OF TERMS AND SPECIAL WORDS

- 1. Abolish- уничтожать
- 2. Accurate зд: точный
- 3. Achieve достигать, достичь
- 4. Acid rain кислотный дождь
- 5. Apply применять
- 6. Approach to подход к
- 7. Вап запрещать
- 8. Ве capable of быть способным на/к чему либо
- 9. Carbon hydrogen углеводородный
- 10. Chest problems болезни дыхательных путей
- 11. Chimney дымовая труба
- 12. Chlorine carbon хлоро-углеводородный
- 13. Combustible горючий, воспламеняющийся
- 14.Contaminate загрязнять, заражать
- 15. Cope with справляться с
- 16.Cough кашлять
- 17. Cut away вырубать (лес)
- 18. Despite несмотря на
- 19. Digestive track пищеварительная система
- 20.Disaster катастрофа
- 21.Disposal зд: удаление отходов
- 22. Distraction разрушение
- 23. Drastic droughts сильная засуха
- 24. Efficiency эффективность
- 25.Eliminate уничтожать
- 26.Emit, eject выбрасывать, выпускать
- 27.Envelop окутывать

- 28. Environmental technologies технологии по защите окружающей среды
- 29. Equipment оборудование
- 30.Fertilizer удобрение
- 31. Fire-extinguisher огнетушитель
- 32. Force заставлять, вынуждать
- 33. Garbage бытовой мусор
- 34.Global warming глобальное потепление
- 35. Greenhouse effect парниковый эффект
- 36. Harden застывать
- 37. Harm вред, ущерб; причинить вред
- 38.Immortal бессмертный
- 39.Infect заражать
- 40.Interdependency взаимозависимость
- 41.Involve вовлекать
- 42. Key substance преобладающее вещество
- 43.Landfill захоронение отходов
- 44.Legislation законодательство
- 45. Major основой, главный
- 46.Mount монтировать
- 47. Package упаковочный материал, упаковка
- 48.Petrol chemical нефтехимический
- 49. Pollution загрязнение окружающей среды
- 50.Portable портативный, переносной
- 51. Power station электростанция
- 52. Precipitation осадок
- 53. Purify очищать
- 54.Range спектр
- 55.Rate уровень
- 56. Recycle перерабатывать для вторичного использования
- 57.Reduce уменьшать

- 58.Refinery-oil нефтеперерабытывающий
- 59. Release выбрасывать, выпускать
- 60. Reveal обнаруживать, выявлять
- 61.Schedule зд: схема
- 62. Secondary products продукты вторичного производства
- 63.Silencer глушитель для машин
- 64. Solve решать проблемы
- 65. Source источник загрязнения
- 66.split (split, split) расщеплять (ся)
- 67.spread распространять (ся)
- 68.stage зд: уровень
- 69.sweep away уносить, сметать
- 70.sulphureous сернистый
- 71.threat угроза; угрожать, представлять угрозу
- 72.tribute дань
- 73.waste мусор, отходы (бытовые и промышленные)
- 74.wax воск
- 75.weapons оружие

### **BIBLIOGRAPHY**

- 1. Федеральные государственные образовательные стандарты высшего профессионального образования. Направление подготовки 230700 «Прикладная информатика». Направление подготовки 230400 «Информационные системы и технологии» [Электронный ресурс] / Режим доступа:http:// http://fgosvo.ru/fgosvpo/7/6/1/22
- 2. Алешугина, Е.А. Способы отбора лексического содержания профессионально профессионально-ориентированной иноязычной подготовки студентов в неязыковом Вузе [Текст]: дис. ... канд. пед. наук / Е.А. Алешугина. Н. Новгород, 2009.
- 3. Лошкарева, Д.А. Совокупность методов компетентностноориентированного совершенствования программы дополнительной профессиональной образовательной программы [Текст]: дис. ... канд. пед. наук / Д.А. Лошкарева. – Н. Новгород, 2012.
- 4. Алешугина, Е.А. Профессионально ориентированный английский язык для специалистов в области информационных технологий. Учебное пособие [Текст] / Е.А. Алешугина, Д.А. Лошкарева. Н.Новгород, ННГАСУ. 2015. 91 с.
- 5. Алешугина Е.А. Профессионально ориентированный английский язык для магистрантов. Учебное пособие [Текст] / Е.А. Алешугина, Д.А. Лошкарева. Н.Новгород, ННГАСУ. 2016. 97 с.
- 6. Алешугина Е.А. Интерактивные технологии в процессе преподавания теоретических языковых дисциплин. / Е.А. Алешугина, Г.К. Крюкова, Н.В. Молькин / Сб тр. конгресса 16-го Международного научнопромышленного форума: в 3-х томах. Нижегородский государственный архитектурно-строительный университет. 2014. С. 279-281.
- 7. Алешугина Е.А. Компетентностно-ориентированное совершенствование дополнительной языковой образовательной программы в техническом

- вузе. / Е.А. Алешугина, В.М. Соколов, Н.Ф. Угодчикова, Д.А. Лошкарева / Н.Нловгород, ННГАСУ. 2013. 131c.
- 8. Баранова Е.Н. Модификация целей иноязычной подготовки специалистов технического профиля в контексте компетентностного подхода. / Е.Н. Баранова / Вестник Нижегородского государственного лингвистического университета им. Н.А. Добролюбова. 2011. № 16. С. 191-202.
- 9. Ваганова О.И. Основы педагогических измерений. / О.И. Ваганова, Н.В. Быстрова / Хроники объединенного фонда электронных ресурсов Наука и образование. 2015. № 7 (74). С. 61.
- 10. Вербицкий, А. А. Активное обучение в высшей школе: контекстный подход: методическое пособие / А. А. Вербицкий / М.: Высшая школа, 1991. 207 с.
- 11. Грудзинская, Е.Ю. Активные методы обучения в высшей школе / Е.Ю. Грудзинская, В.В. Марико // Учебно-методические материалы по программе повышения квалификации «Современные педагогические и информационные технологии». Н. Новгород. 2007. 182 с.
- 12. Саркисян, Т.А. Профессиональный английский для ландшафтных архитекторов [Текст]: учебн. пос. для вузов / Т.А. Саркисян; Нижегород. гос. архит.-строит. ун-т Н.Новгород: ННГАСУ, 2013. 91 с.
- 13. Саркисян, Т.А. Формирование иноязычной речевой компетенции студентов нелингвистичеких вузов/
   Т.А. Саркисян // Приволжский научный журнал. 2013. №2. С.134-138.
- 14. Солуянова, О.Н. English for Computing in Construction (Английский для программистов в строительной сфере): учебн.-методич. пособие. Москва: МГСУ, 2013 120 с.
- 15. Стандарт на вид издания: Учебник, учебное пособие, курс лекций. Редакция 2012 года. ДП 7.3. 01 2012
- 16. Угодчикова, Н.Ф. Интенсивный курс обучения иностранным языкам / Н.Ф. Угодчикова, Л.П. Бельковец // метод. указ.для студентов неязыковых вузов Н. Новгород, 1998. 49с.

- 17. http://en.wikipedia.org/wiki/File
- 18. http://en.academic.ru/dic.nsf/enwiki
- 19. http://webdesignfromscratch.com>web-design/10...web-sites
- 20. http://ecological-problems.blogspot.ru/2009/01/ecology-and-ecological-problems.html
  - 21. http://englishinn.ru/texts-on-the-topic-ecologu-ecological-problems.html
- 22.http://www.interactive-english.ru/topiki/91-ecological-problems-ekologicheskie-problemy/
  - 23. https://www.learnathome.ru/blog/topic-ecological-problems
  - 24. https://en.wikipedia.org/wiki/Environmental\_protection
  - 25. https://en.wikipedia.org/wiki/Environmental\_issue

### **ЗАКЛЮЧЕНИЕ**

Авторы надеются, что предлагаемое учебное пособие будет полезным для преподавателей иностранного языка, студентов, изучающих проблемы окружающей среды и для бакалавров по направлению подготовки «Экология и природопользование».

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