**Перевод текста**

ИСКОПАЕМОЕ ТОПЛИВО

Ископаемое топливо или газовое топливо — это топливо, образующееся из природных ресурсов, таких как: анаэробное разложение погребенных мертвых организмов. Возраст организмов и получаемое ими ископаемое топливо обычно составляет миллионы лет, а иногда и превышает их 650 миллионов лет назад. Эти виды топлива содержат высокий процент углерода и углеводородный.

Ископаемые виды топлива варьируются от летучих материалов с низким соотношением углерода и водорода как метан, к жидкой нефти к нелетучим материалам, состоящим из почти чистых углерод, как антрацитовый уголь. Метан можно найти только на месторождениях углеводородов, ассоциируется с нефтью или в виде клатратов метана. Это общепринято что они образовались из окаменелых останков мертвых растений и животных путем воздействия тепла и давления в земной коре на протяжении сотен миллионов лет. Эта биогенная теория была впервые введена Георгом Агриколой в 1556 г. позже-Михаилом Ломоносовым в 18 веке.

По оценкам Управления энергетической информации, в 2007 г. первичные источники энергии состояли из нефти 36,0%, угля 27,4%, природного газа 23,0%, что составляет 86,4% доли ископаемого топлива в первичной энергетике потребление в мире. Не ископаемые источники в 2006 году включали гидроэлектростанции 6.3%, ядерные 8,5%, а другие (геотермальные, солнечные, приливные, ветровые, древесные, отходы) составляют 0,9 процент. Мировое потребление энергии росло примерно на 2,3% в год.

Ископаемые виды топлива являются не возобновляемыми ресурсами, потому что они занимают миллионы лет формируются, а запасы истощаются гораздо быстрее, чем создаются новые сформированный. Производство и использование ископаемых видов топлива вызывает озабоченность в области охраны окружающей среды. Один таким образом, глобальное движение в сторону производства возобновляемых источников энергии находится под угрозой способ помочь удовлетворить возросшие потребности в энергии.

Сжигание ископаемого топлива дает около 21,3 миллиарда тонн (21,3 гигатонны) углекислого газа в год, но подсчитано, что природные процессы могут только поглотите около половины этой суммы, так что чистый прирост составит 10,65 миллиарда тонн нефти. атмосферный углекислый газ в год (одна тонна атмосферного углерода эквивалентна до 44/12 или 3,7 тонны углекислого газа). Углекислый газ – это одна из теплиц газы, которые усиливают радиоактивное воздействие и способствуют глобальному потеплению, вызывая средняя температура поверхности Земли повышается в ответ на то, какой климат ученые сходятся во мнении, что это вызовет серьезные негативные последствия.

**Exercises to the text "Fossil Fuels"**

**3. Answer the following sentences:**

1. *What is the other name for*[*fossil fuels*](https://lms.kgeu.ru/mod/resource/view.php?id=82809)*?*- gas fuels
2. *What are*[*fossil fuels*](https://lms.kgeu.ru/mod/resource/view.php?id=82809)*formed by?*
- are fuels formed by natural resources such as anaerobic decomposition of buried dead organisms.
3. *What do*[*fossil fuels*](https://lms.kgeu.ru/mod/resource/view.php?id=82809)*contain?*
- these fuels contain a high percentage of carbon and hydrocarbons.
4. *What carbon do volatile materials contain?*
- Methane
5. *What carbon do nonvolatile materials contain?*
- anthracite coal
6. *What is the percentage of fossil fuel primary source usage?*- 86.4% share for fossil fuels in primary energy consumption in the world.
7. *What is the percentage of non-fossil fuel primary source usage?*
- non-fossil sources in 2006 included hydroelectric 6.3%, nuclear 8.5%, and other (geothermal, solar, tide, wind, wood, waste) amounting 0.9 percent. World energy consumption was growing about 2.3% per year.
8. *Are*[*fossil fuels*](https://lms.kgeu.ru/mod/resource/view.php?id=82809)*renewable resources?*- fossil fuels are non-renewable resources
9. *How many tons of carbon dioxide does the burning of*[*fossil fuels*](https://lms.kgeu.ru/mod/resource/view.php?id=82809)*produce per year?*
-the burning of fossil fuels produces around 21.3 billion ton (21.3 gigaton) of carbon dioxide per year.
10. *How many of this amount can natural processes absorb?*
- but it is estimated that natural processes can only absorb about half of that amount, so there is a net increase of 10.65 billion ton.
11. *Does carbon dioxide enhance radioactive forcing and contribute to global warming?*
- Yes, Carbon dioxide is one of the greenhouse gases that enhances radioactive forcing and contributes to global warming.

**4. Fill in the missed words and word combinations:**

1. ***Non-fossil*** sources in 2006 included hydroelectric 6.3%, nuclear 8.5%, and (geothermal, solar, tide, wind, wood, waste) amounting 0.9 percent.
2. A global movement toward ***the generation*** of renewable energy is therefore under way to help meet increased energy needs.
3. Carbon dioxide is one of the ***greenhouse*** gases that enhances radioactive forcing and contributes to... warming.
4. Fossil fuels are ***non-renewable*** resources.
5. Fossil fuels or ***gas fuels*** are fuels formed by natural resources.
6. Fossil fuels range from ***volatile*** materials with ***low*** carbon to ***nonvolatile*** materials composed of almost ***pure*** carbon.
7. Fossil fuels reserves are being depleted much ***faster*** than new ones are being formed.
8. In 2007 ***primary*** sources of energy consisted of petroleum 36.0%, coal 27.4%, natural gas 23.0%
9. It causes the ***average*** surface temperature of the Earth to rise in response.
10. It is generally accepted that they formed from the fossilized remains of dead plants and animals by ***exposure*** to heat and pressure in the Earth's crust over hundreds of millions of years.
11. Methane can be found in ***hydrocarbon*** fields.
12. Natural processes can only ***absorb*** about half of that amount.
13. The burning of fossil fuels produces around 21.3 billion ton of ***carbon dioxide*** per year.
14. The production and use of fossil fuels raise ***environmental*** concerns.
15. This ***biogenic*** theory was first introduced by Georg Agricola in 1556 and later by Mikhail Lomonosov in the 18th century.
16. World energy ***consumption*** was growing about 2.3% per year.

**5. Put the verb into appropriate form:**

*to be, to exceed, to contain, to range, to include, to take, to raise, to produce, to enhance, to contribute, to cause*

1. Carbon dioxide ***will*** cause major adverse effects.
2. Carbon dioxide ***enhances*** radioactive forcing.
3. Carbon dioxide ***contributes*** to global warming.
4. Fossil fuels ***take*** millions of years to form.
5. Fossil fuels ***are*** non-renewable resources.
6. Fossil fuels ***contain*** a high percentage of carbon and hydrocarbons.
7. Fossil fuels ***range*** from volatile materials to nonvolatile materials.
8. Fossil fuels or gas fuels ***are*** fuels formed by natural resources.
9. In 2007 primary sources of energy ***consisted*** petroleum 36.0%, coal 27.4%, natural gas 23.0%.
10. It ***causes*** the average surface temperature of the Earth to rise in response
11. Non-fossil sources in 2006 ***included*** hydroelectric 6.3%, nuclear 8.5%, and others (geothermal, solar, tide, wind, wood, waste) amounting 0.9 percent.
12. Sometimes it ***exceeds*** 650 million years.
13. The age of the organisms and their resulting fossil fuels is typically millions of years.
14. The burning of fossil fuels ***produces*** around 21.3 billion ton of carbon dioxide per year.
15. The production and use of fossil fuels ***raise*** environmental concerns.
16. There ***is*** a net increase of atmospheric carbon dioxide per year.

**6. Make the following sentences interrogative and negative:**

 1. *Fossil fuels* or *gas fuels* are fuels formed by natural resources?

- fossil fuels or gas fields are fuels that are not generated from natural resources.

*2.  How Old are the buried dead organisms?*

- The age of buried dead organisms and their results is not millions of years.

*3.  It is more than 650 million years old?*

- it doesn't exceed 650 million years.

*4.  Which types of fuel contain a high percentage of carbon and hydrocarbons?*

- the se fuels do not contain a high percentage of carbon and hydrocarbons.

*5.  Whether Fossil fuels range from volatile materials to non- volatile materials?*

- fossil fuels do not range from volatile materials to non- volatile materials.

*6.  Whether non- Volatile materials consist of pure carbon?*

- non-volatile materials do not consist of pure carbon.

*7 How many percent of primary energy sources were used in 2007?*

- in 2007, primary energy sources were not yet oil-36.0%, coal-27.4% and natural gas-23.0%.

*8.  How many percent of the world's primary energy consumption is made up of fossil fuels?*

- the share of fossil fuels in global primary energy consumption was not 86.4%

*9.  What non-Digested sources included in 2006?*

- non-excavated sources in 2006 did not include hydroelectric, nuclear, and (geothermal, solar, tidal, wind, wood, and waste).

*10. How many percent of the World's energy consumption grew per year?*

- global energy consumption did not grow by 2.3% per year.

*11.  Is Fossil fuel a renewable resource?*

- fossil fuels are renewable resources.

*12. How many years does it take to form them?*

 - they don 't take millions of years to form.

*13. Are fossil fuel Reserves slowly being depleted?*

- fossil fuel reserves are not being depleted quickly.

*14. What causes concern in the field of environmental protection?*

- the production and use of fossil fuels does not raise environmental concerns.

*15. Whether the Burning of fossil fuels produces a large amount of carbon dioxide per year?*

- burning fossil fuels does not produce a large amount of carbon dioxide per year.

*16. Often there is a net increase in atmospheric carbon dioxide?*

- natural processes can not only absorb about half of this amount, so the net increase in atmospheric carbon dioxide occurs annually.

*17. Is carbon dioxide a greenhouse gas?*

- carbon dioxide is one of the greenhouse gases that enhances radioactive forcing and contributes to global warming

*18. Does carbon dioxide cause an increase in the average temperature of the Earth's surface?*

- carbon dioxide does not cause an increase in the average surface temperature of the Earth in response to this.

*19. This can cause serious negative consequences?*

- this will not cause serious negative consequences.