# СЕКЦИЯ 10. НАУЧНО-ТЕХНИЧЕСКИЙ ДИСКУРС «ИНТЕЛЛЕКТУАЛЬНЫЕ ЭНЕРГОСИСТЕМЫ»

## BIOFUEL AS AN ALTERNATIVE SOURCE OF ENERGY

Е.А. Колесник<sup>1</sup>, В.В. Воробьева<sup>2</sup> Томский политехнический университет ЭНИН, <sup>2</sup>ИЯЭИ, <sup>1</sup>группа 5А44

#### **Abstract**

New sources of energy have to replace fossil fuels because of a-man made ecological catastrophe. In this article there is a question of biofuel as an alternative source of energy in the world. The types of this renewable source of energy are revealed and analyzed. This paper quantify biofuel by presentation what it is, advantages and disadvantages of using this type of energy and how it uses. There is an investigation of future of biofuel.

Key words: biofuel, alternative source of energy.

# Introduction

The world is interested in location of a renewable energy source to substitute fossil fuels. There is a global ecological problem, and using of traditional energy is one of the reasons of this disaster. Biofuel is a totally renewable source. It is always possible to resume biomass products. Biofuel is often used in some countries, such as Sri Lanka, China, India and in some regions in Africa.

### **Main discussion**

There are many types of biofuel. Biofuel energy can be shared mainly in two generations. They are called First Generation Biofuels and Second Generation Biofuels.

The First Generation includes sugar, starch, vegetable oil or animal fats. These products are turned into fuel using already-known processes. These fuels include biodiesel, bioalcohols, ethanol, and biogasses, like methane captured from landfill decomposition. This generation is the "original" and constitutes the majority of biofuels currently in use [3].

The Second Generation includes non-food crops like switch-grass, willow or wood chips. The most these fuels are underdevelopment and not widely available for use.

Biofuel source of energy has many advantages. They are:

1. Biofuel emits less than fossil fuels. Biofuel is friendly to ecology.

- 2. Biofuel is a renewable and sustainable energy source. It is always possible to get generation products and it is created from sources that will not run out.
- 3. Biofuels are made from many different sources. It is not very difficult to source [2].

It is also worth saying that some countries can be not depended only on fossil fuels [3].

But technology of turning biomass into energy is difficult and not is everywhere applicable.

Firstly, getting of some generation products depends on nature ability of region. In some districts there is a problem to get necessary crop, because of the different weather.

Secondly, the regional nature of high-producing plants is very good source of biomass. This evisceration can lead to great environmental problems.

Finally, it isn't petroleum-based fuel, so it will operate differently in engines designed for petroleum-based fuel.

# **Conclusion**

Biofuel is not totally available energy source. But it is going to be a perspective one. Natural resources of the world can save our planet, but it is also necessary to face issues, which disturb population to use it. However, biofuel can help people to make ecology much better.

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Научный руководитель: В.В. Воробьева, к.ф.н., доцент ИЯЭИ ЭНИН ТПУ.