

Modern drones use commutatorless motors as a source of energy. They have specific limitation of their flight characteristics: typical weight of a drone varies from 1 kg to 4 kg and their flight time varies from 10 to 30 minutes (There are some unique drones that have the flight time about 40-50 minutes).

The drone can lift about 500g – 3 kg that allow taking a small camera.

## **ENVIRONMENTAL PROBLEMS**

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The purpose of this work is to illustrate why the degree of water, air and soil pollution increases year after year and is considered to be a serious international problem.

### **Introduction**

Although we live on the Earth and have to control over much of our environment, the Earth does not belong to us. It is also home for plants, animals, insects, birds and fish, and it will be home for future generations of humans. Because of this, we have a responsibility to protect the environment.

### **Major environmental problems**

Nowadays, most of the Earth's major environmental problems, such as the holes in the ozone layer, have been caused by humans and we are the only ones able to solve them. We have to start recognizing that our actions can lead to environmental damage.

### **Solutions**

First and foremost, a lot of people still think that there is little they can do to help the environment. They are sure that it is the duty of the government and big companies to make our planet cleaner: to recycle waste materials, to protect rare animals and plants, to install antipollution equipment and so on. But they are wrong. Everybody must take part in reducing pollution. And in our research, we suggest some of the ways.

#### **1. Recycling centers**

What is more, there is still a lot of rubbish everywhere. Many people have always polluted their surroundings. Recycled waste can be made into new products and it can help save natural resources. To my mind, it would be great if recycling centers paid people for the rubbish they brought in.

#### **2. Protection method of environmental**

Finally, I strongly feel that education is extremely important. For example, if people learn to recycle their waste, instead of just throwing it away, we will not have to destroy the countryside. Landfill sites will not have to be constructed, and factories, which pollute the atmosphere, will not have to produce so many new products.

## Conclusion

To sum up, it is necessary to believe that all of us must do our best to be as green and as environmentally friendly as possible. The whole future of the planet is in our hands.

## REFERENCES:

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## CASE STUDY OF THE “TITANIUM VALLEY” POWER SUPPLY

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Power supply problems are very urgent and different official events are devoted to the discussion of this problem. One of the most popular forms of public discussion is forum. Forum is place used for debates in which anyone can participate during open discussions on various urgent issues. With the development of communication technologies new forms of forums are held through Skype, but some discussions can build up without all users having to be online at the same time.

One of the technique used during the forum held from 22<sup>th</sup> to 29<sup>th</sup> of August, 2016 in Sverdlovsk region was a case study. The term “case study” is used loosely in various sources of scientific and professional literature. The key features of a “case study” are its scientific contribution and its evidence base for professional applications [2]. In spite of a lot of works devoted to the concept “case study” little attention is paid to the usefulness of this method. Case study is defined as analyses of people, events, decisions, periods, projects, policies, institutions, or other systems and is the subject of the inquiry of a class of phenomena that provides an analytical frame — an object — within which the study is conducted and which the case illuminates and explicates.

All participants of the forum called “Energy of Youth” were divided into 3 teams solving the same problem at different stages.

The first stage was focused on the analysis of Sverdlovsk region energy efficiency. Energy efficiency is the ratio between power generation and power consumption. To carry out the analysis on energy efficiency Sverdlovsk region was chosen. The choice of the above mentioned region can be explained by the ambitious plans to build a special economic zone called the “Titanium valley”.