LIVING GREEN

- sustainable living-

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ABSTRACT

This essay will contain the most important facts about our planet, its current state, how much it has changed through a long period of time and how much it is going to change if we all don't undertake something immediately. I will also write about measures that people should take in order to improve their lives and to save the Earth of dying, literally. The fact is that the Earth is constantly changing. Some changes are a natural part of the climate system. The responsibility for other changes, such as Antarctic ozone hole, falls squarely on humanity's shoulders. What is worse, the majority of people are not even aware of how big negative impact, they have on the planet, is.

I chose this topic because I wanted to explore how many people, especially teenagers, are familiar with this problem. I wanted to find out if any of them was doing something about the problem and what we generally could do to make things better.

I want to try to make teenagers think about the Earth and its condition which is caused by people's negligence, bad behavior and ignorance. They should think more about what they are doing, how their deeds affect the Earth and how they can make small steps for the better future. I want to raise their awareness and make them think about their own lifestyle and what they can do to lead a more environmentally friendly life, how they can start living green.

Key words: the Earth, living green, ecological problems

REZIME

Ovaj rad će se sadržati najznačajnije činjenice o našoj planeti, njenom trenutnom stanju, koliko se promenila kroz dugi vremenski period i koliko će se promeniti ako svi mi odmah nešto ne preduzmemo. Takođe ću pisati o merama koje bi trebalo sprovesti da bi se poboljšao život ljudi i da bi se Zemlja bukvalno spasila od umiranja. Činjenica je da se Zemlja stalno menja. Neke promene su prirodni deo klimatskog sistema. Odgovornost za druge promene, kao što su Ozonska rupa na Antartiku, pada uglavnom na ljudska ledja. Što je još gore, većina ljudi nije ni svesna koliko je veliki uticaj koji imaju na planetu.

Odabrala sma ovu temu zato što sam želela da istražim koliko mladih ljudi, naročito tinejdzera, je upoznato sa ovim problemom. Želela sam da saznam da li neko od njih radi nešto u vezi sa problemom i šta mi generalno možemo da uradimo da popravimo stvari.

Želim da pokušam da nateram tinejdzere da misle o planeti Zemlji, o njenom stanju koje je prouzrokovano ljudskom nemarnošću, lošim ponašanjem i neznanjem. Trebalo bi da više misle o tome šta rade, kako njihova dela utiču na Zemlju i kako mogu da naprave male korake ka boljoj budućnosti. Želim da podignem njihovu svest i da ih nateram da misle o sopstvenom načinu života i šta mogu da urade kako bi vodili život bliži prirodi, kako da počnu da žive u skldu sa prirodom.

Ključne reči: zemlja, živeti u skladu sa prirodom, ekološki problemi



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THE EARTH GENERALLY SPEAKING

The Earth is the only planet in our solar system that can provide a home for human beings. It has sufficient light, heat, and water to support a wide range of plants and animals. Everything about the earth works together perfectly in order to support life.

Humans are constantly forgetting how Earth existed many years before them, and how Earth can exist without them. They, on the other hand, cannot exist without Earth because Earth is so far the only planet capable to support life. Instead of taking care of it, humans keep destroying it in one way or another. People do many activities that harm the environment, whether by releasing harmful chemicals into the air or by driving, instead of walking or cycling, by using plastic bags at stores, throwing the rubbish, not recycling, reusing, reducing, etc. To be precised, by not living green.

There is no doubt that current condition of our planet definitely belongs to "global ecological crisis" category. We have made tremendous environmental mess over the years, and as always, things need to become critical before we start fixing them.

Environment is a resource, which is being consumed at an exponential rate. Unfortunately, this resource cannot be easily renewed. In desire to improve our lives, we have put our own survival to the edge, and we still keep going in the same direction. With the growing population even the problems are becoming worse.

The Earth is down on her knees not able to defend itself from so many different ecological problems, such as global warming, climate change, deforestation, biodiversity loss, pollution and others which make this list endless. We should stop taking things for granted, and accept the fact that we are not supreme rulers of our planet. By helping our planet we are helping ourselves because Earth is still our only home.

DEFORESTATION

Deforestation represents one of the great forces in global environmental change and one of the great drivers of biodiversity loss. That is cutting down trees, destroying or damaging them at an alarming rate in order to create more space. As the population grows people need more and more expansion for themselves. Unfortunately, so many forests are cleared out and it is even getting worse in days to come.

Deforestation has many negative effects on the environment. Loss of habitat for millions of species is one of them. Every species is unique for itself, but they all depend on each other for survival. When people deforest an area, they are destroying thousands of species, most of which they do not know anything about. It means the destruction and extinction of many plants and animals whose benefits will be left undiscovered. In that way, we might lose the only cure for some diseases which are hidden in some of the destroyed species.

Deforestation also causes climate change. Trees absorb large quantities of CO₂ which regulates climate and helps in slowing the global warming impact, too. When a tree is cut down, carbon is released back into the atmosphere. The more trees disappear the less carbon emissions they sink but what is even worse is often use of slash and burn techniques. In that way we are constantly releasing huge amounts of CO₂ in the atmosphere. Trees play a critical role in absorbing the greenhouse gases that fuel global warming. Fewer forests means larger amounts of greenhouse gases entering the atmosphere and the increased speed and severity of global warming.



Except for their beauty, forests are highly responsible in keeping in order global ecosystems. In fact, much of the quality of life we enjoy, we owe to the forests. It is also the home of more than half of all creatures and organisms in the planet. Deforestation is really one of the biggest environmental evils that happen on our planet, and if current trend continues our planet will head into a real environmental disaster. About half of the forests that once covered the earth have already gone. In some areas the situation is really no longer alarming, it is already in critical zone and we are definitely not doing enough to protect the ones that remain. Our nature means so much to us but most people still do not understand how dangerous situation really is. What we definitely need is some very quick solution to stop deforestation. Forests are a precious life support system of the planet and we need to protect them!

ANIMALS

Animals play an important role in our natural environment. Every organism in an ecosystem plays some role in keeping things healthy and in balance. All species are equally important in this circle of life but many of them are endangered, heading for extinction. Endangered animals is the term very often used lately because of the different ecological issues which are making it hard for many animals to survive, pushing some of them at the very brink of

extinction. In breaf, endangered animals are those animals that are for some reasons at risk of becoming extinct. There are many factors responsible for this condition, but all these factors exist mostly because of the humans.

The extinction of animals is not anything new. On the one hand, many animals became extinct long before man's arrival on Earth (such as dinosaurs). This is what scientists call the "natural extinction". Natural extinction can sometimes take many million years, and is characterized by the gradual and steady decline of some animal species. On the other hand, humans have significantly accelerated the rate of extinction in the last 100 years, and it will just get worse in years to come.

The most important factor responsible for such large number of endangered animals is the loss of habitat. Nearly all animals require food, water and shelter to survive. When people destroy their native home, they become unprotected and just a small number of those animals survive. Human population is constantly increasing, they need more and more space for houses, farms, buildings, industries, and animals stand in their way. They do not think about others, and about the future. They just think about how to satisfy current needs and that is the problem of humanity which should we all think about.

What is more, Man has been killing animals since the time he acquired the skill of hunting. Although in those times, hunting was the means for survival, humans continued killing animals even after they did not have to. The relentless hunting by humans has wiped out a large number of animals in just a century. Besides hunting, human activities like climate change, global warming, deforestation, and different forms of pollution are just some among many of them which contribute to animal extinction. It seems like almost every day we get a new member on an endangered species list. Some of the animals which are under the risk of going extinct are polar bears, pandas, gorillas, tigers, some penguin species, and many others. As the years go by the list gets bigger and bigger.



Very few people think of this problem, and even fewer actually do something to make the difference. We created a terrible environmental mess mainly because we think we are smarter

than nature. And the result of this? Whole bunch of different environmental problems that are becoming more and more serious. Their impact on the environment is becoming stronger and stronger which gives animals very little time to adapt to changed conditions. We should be protecting our planet, and keeping it healthy not only for us but also for the animals. Current number of endangered animals across the globe is really a big reason to worry and we have to give our best and make a change.

GLOBAL WARMING

Global warming refers to an average increase in the Earth's temperature, as a result of the greenhouse effect, which in turn, causes climate change. A warmer earth may lead to changes in rainfall patterns, a rise in sea level and a huge impact on plants, wildlife and humans. Certain gases in the atmosphere act like glass in a greenhouse, allowing sunlight through to heat the earth's surface but trapping the heat as it radiates back into space. As the greenhouse gases build up in the atmosphere the Earth gets hotter. This process is leading to significant and long-term changes in average temperature, known as climate change. The rapid rise in greenhouse gases is a problem because it is changing the climate faster than some living things may be able to adapt. It has become perhaps the most complicated issue facing the world. Global warming is caused by the greenhouse effect.

GREENHOUSE EFFECT

Therefore the issue is not whether there is a greenhouse effect, but whether and how human activities cause increases in gases that contribute to the greenhouse effect, and what the potential implications are for human society and life on the Earth.

The greenhouse effect is a natural process that keeps the Earth warm. It is caused by a layer of gases that traps heat energy from the Sun. This layer of gases is made up of water vapour, carbon dioxide, nitrous oxide and methane, which are called the greenhouse gases. As heat energy reaches the Earth, some of it is absorbed, and some of it is reflected into space. However, some of the reflected heat is trapped in the atmosphere by the greenhouse gases. The emission of greenhouse gases has been increasing due to the increases in technology and human developments. Human activities are the main reason why there is an increase in global temperature. Industries, vehicles, farms and dumps are all the sources of greenhouse gases. These activities are known to produce a lot of harmful gases which intensify the greenhouse effect and result in a warmer Earth. Therefore the issue is not whether there is a greenhouse effect, but whether and how human activities cause increases in gases that contribute to the greenhouse effect, and what the potential implications are for human society and life on the Earth.



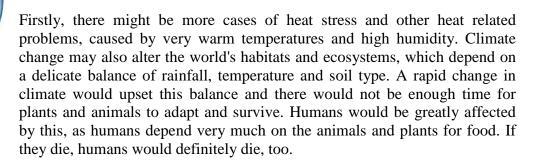
One of the main greenhouse gases is carbon dioxide (CO₂). As trees grow, they take in CO₂ from the air. When the wood dies the CO₂ is returned to the air. Deforestation is increasing the half of the process adding to the CO₂ in the atmosphere. The loss of the forests means that there are fewer trees to absorb CO₂. The content of the CO₂ comes from burning of coal, oil and other fossil fuels as well. These fossil fuels are burned in cars, power stations and factories. Televisions, lights and computers use electricity that is created mainly from burning coal. Every time we switch on a light we are adding to the greenhouse effect. The greenhouse effect is vital for the survival of humans. Without the greenhouse effect, temperatures on Earth could drop by about 33 degrees Celsius. However, if the greenhouse effect becomes stronger, it could make the Earth hotter than usual. This extra warming may cause climate change, which would be a great problem for humans, animals and plants. The rapid rise in greenhouse gases is a problem because it is changing the climate faster than some living creatures may be able to adapt.

WHAT ARE THE EFFECTS OF GLOBAL WARMING?

Global warming effects are real, global and measurable. Its effects on animals and plants are indeed frightening, and the effects on the human population are even scarier. The causes are mainly from us, the human race, and the effects on us will be severe.

Consequences of global warming could include a rise in sea level, due both to the warming and resultant expansion of ocean water and to the melting of polar ice caps; and local changes in temperature. These changes, in turn, could cause the flooding of densely populated

land in coastal areas worldwide, local droughts or flooding, and major losses of plant and animal species.



Another popular prediction is that sea levels would rise globally. Melting ice caps will throw the global ecosystem out of balance. This is based on the belief that the ice near the Poles would melt and add more water to the oceans, due to the rise in global temperature. Water would also expand and take up more space, due to more heat. Altogether, these would cause sea levels to rise. As oceans warm and glaciers melt, land and cities along the coast may be flooded. Storms, tornadoes and hurricanes will become more frequent and stronger as oceans heat up causing more water to evaporate. As temperature rises, some areas will become dryer and water sources will evaporate or be used up sooner than they are replenished. Heat and drought may cause forests to die and food crops to fail. Global warming will affect weather everywhere, plants and animals everywhere, people everywhere. It will affect the whole world!

global warming.

If people don't take the action the greenhouse effect could lead to a rise in average temperature of between 1.5 - 4.5 degrees Celsius in the near future. These rises will be greater towards the poles and less at the tropics. There will also be more warming in winter than in summer. Such increase will make the world hotter than it has been for more than 100,000 years.

Global warming is a pressing problem that if not solved soon could leave everyone on this planet in most dire of circumstances. However, you don't have to be a scientist with a miracle solution with countless resources to help. All it takes is a few simple lifestyle changes, a sense of responsibility, and a positive caring attitude.

POLLUTION

The most appropriate definition of environmental pollution would be the introduction of different harmful materials into certain environment that makes this environment unhealthy to live in. Pollution has become a major issue over the years because it contaminates the Earth's environment and affects human health. Pollution can take many forms. The air we breathe, the water we drink, the ground where we grow our food, and even the increasing noise we hear every day - all contribute to health problems and a lower quality of life. Some environmental pollution is a result of natural causes (volcanic eruptions, sandstorms and natural forest fires). These events cause a large amount of substances such as ash and dust, which are harmful to our health. However, human activities have a more harmful impact to the pollution of the environment.

The rapid growth of the world population has been closely related to the rapid increase in all forms of pollution. The most common pollutants are usually chemicals, garbage, and waste water. Environmental pollution is happening almost in every part of the world, especially in form of land, air and water pollution.

Land pollution deals with tons and tons of domestic waste which is thrown every day from fish bones to huge pieces of rubbish such as unused refrigerator. If all these wastes are not

disposed properly, the damage they can do to the environment and humankind can be extremely huge. While waste collected from homes, offices and industries may be recycled; a large amount of rubbish is not recycled but is left in certain areas marked by the government as dumping grounds. With the rising standards of living, we throw away more things and there is an increase in the quantity of solid waste. This has given rise to problems as new dumping grounds have to be found.



Air pollution refers the discharge of harmful gases and dust into the atmosphere. When these harmful substances enter the air around us, they may cause irreversible damage to humans and to our environment. The most serious cause of air pollution is heavy industrial activity. When fossil fuels such as coal and oil are burnt to produce electricity, large quantities of harmful gases are released into the air. Many industries, factories and companies cause air pollution. pollutes Vehicles use environment as well. Air pollution, for instance, leads to problems with lungs and respiratory diseases, and long-term exposure

to air pollution can even lead to cancer and harm living things.

Water pollution occurs when waste materials from industries and domestic sources are discharged into rivers, lakes and seas. Factories and industries often release poisonous chemical substances into seas, rivers or lakes, resulting in the destruction of our planet. In that way many people can get poisoned and some can eventually die. When ships transport oil from one country to another and get damaged en route, oil spillage occurs. Sometimes, rubbish is irresponsibly dumped into the sea not caring whether that will endanger many human beings and the nature as well.

Many people pollute the environment because they are lazy. They simply throw their waste in water or on the ground instead of going to the trash bin to put their garbage away. They do not reflect on the consequences and effects that it can do to the world they're living in. On the other hand, people can pollute the environment by accident. They pollute due to fact that they have not been correctly educated as to how chemicals and waste are damaging the Earth. People have to become more aware of the consequences and effects of disposing their waste into the environment. This will broaden their horizons and protect the world for the next generation. Pollution needs to stop!

LIVING GREEN

Living green or **sustainable living** means having environmentally-friendly lifestyle. It means making decisions which have good impact on the environment rather than doing things that are

harmful to our planet. And that involves making as small impact on the natural environment as possible.

It also means taking steps, whether big or small, to minimize the harm humans do to the environment. The good news is that every green action, no matter how small, moves us towards on the journey to sustainability. Each new effort to use green products, services and technologies into our daily lives and business deepens our shade of green.

It can mean just starting out with one simple step and then growing from there. Living green does not have to be hard. It does not mean that people have to change everything about their lifestyle and give up all the pleasures in life. If you try to make huge changes, you will probably give up and return to your old ways, so it is best to make small changes first, as they are easier to adapt to. For example, most people brush their teeth with the water running, if they turned it off until they needed it, they could help a lot and do a small thing for them, but a huge one for our planet. That is going green. Never mind if it is a small change or big one, every green step matters!

Nevertheless, what living green means is that we do something about this situation. Indeed, there are things we can do to reduce the impact of our daily activities on this Earth. Living green can be accomplished through doing what is known as "the 3Rs": reduce, reuse and recycle.

THE THREE Rs



"3R" is a very famous term used to describe the three ways which help to produce less waste. They conserve natural resources, landfill space and energy. These three words - reduce, reuse and recycle, are very important if you want to live on a clean planet and one that is not overflowing with everyday's garbage. Reduce, reuse and

recycle is the thing to repeat to yourself each time you want to throw something away.

First, try to use less. Next, find ways to reuse the stuff you do use. Finally, if you can't do either, see if you can recycle what you've got.

Reduce means we reduce the use of materials that could damage the environment. This involves buying items that are going to last longer so you don't have to buy single-use ones. Sure, there will be some items that do not have a long shelf life but you can still try to find items that do. It simply means throwing things less.

^{*}Reduce the amount of waste you produce.

^{*}Reuse old items; donate to the unfortunate, repair if broken.

^{*}Recycle as much as possible; buy recycled products to support recycling.

Reuse includes repairing old things, donating them to charity groups or using them in a different way. Don't throw out clothes, toys, furniture, and other things that you don't want anymore. Somebody else can probably use them. You can bring them to a center that collects donations or give them to friends. By reusing everyday items, we can do a lot to help protect nature and reduce our use of natural resources.

Recycle turns materials, which would otherwise become waste, into valuable materials. In simple language, what is recycling about is simply giving old or used things a new lease of life, by making new things out of the old materials. The recycling process involves the collection of recyclable materials, sorting and processing them into raw materials and manufacturing them into new products. It is very important to sort your recyclables. Separate your garbage into the appropriate recycle bin. Plastic goes into one container. Paper goes into another, and glass goes into separate, too. Then all three along with the garbage that cannot be recycled is picked up by the local sanitation or recycling program. You can help the environment by buying products that contain recycled materials, as well.

Recycling reduces the need for landfills, but also does much more. Trash takes months and sometimes years to decompose. By recycling, you are conserving natural resources, such as trees, metal ores, minerals, oil, and water. You are also reducing the amount of pollution and greenhouse gases released into the environment, and you are conserving energy. Recycling can be fun and easy, and by recycling you are helping yourself, your community and what is more, your planet.

GREEN LIVING TIPS

Here are some tips for having a greener lifestyle:

- Buy products that don't have a lot of packaging. Some products are wrapped in many layers of plastic and paperboard even though they don't need to be.
- Instead of buying something you're not going to use very often, see if you can borrow it from someone you know.
- Cars use up energy and cause pollution. Some ways to reduce the environmental damage caused by cars include walking, taking the bus, or riding your bike instead of driving.
- You can reduce waste by using a computer! Many newspapers and magazines are online now. Instead of buying the paper versions, you can find them on the Internet
- Save energy by turning off lights, tv and computer that you are not using.
- Save water by turning it off while you brush your teeth.
- Stop littering around!

As the state of the Earth is so critical, there are hundreds of organizations dedicated to raise awareness and find solutions. While most people do not care at all for their deeds which affect the Earth, the others are giving their best to try to make a change.

Earth Hour is a global movement which encourages individuals, businesses and governments around the world to take positive actions for the environment. On March 31, 2012, hundreds of millions of people around the world, in thousands of cities, at hundreds of landmarks, on all seven continents, switched off their lights for one hour to display a universal commitment to protect the one thing that unites us all - the planet.

Earth Hour takes place on the last Saturday of March at 8:30 p.m. for one hour. The event spread, uniting people around the world in their desire to stop things getting worse. Earth Hour began on March 31, 2007 when more than two million individuals and two thousand businesses in Sydney, Australia turned off their lights for one hour to take action against climate change.

Taking the first step is as easy as turning off your lights. By switching off your lights for one hour on Saturday, March 31, you acknowledge and celebrate your commitment to do something more for the planet. But there's more to it than switching off lights for one hour once a year. It's about giving people a voice and working together to create a better future for our planet.

Earth Day is an entire day celebration, and in a sense commemorates the start of the modern environmental movement in 1970. It was started by Gaylord Nelson to raise awareness about air and water pollution. Today, Earth Day highlights a broad array of environmental issues. Earth Day could fail on either of two days, depending on your preference for when you want to observe it. Some people celebrate Earth Day on the first day of spring (around March 21) while others observe Earth Day on April 22. In either case, the purpose of the day is to inspire appreciation for the Earth's environment and awareness of issues that threaten it.

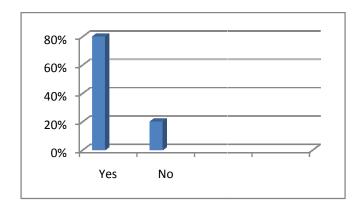
You can honor Earth Day by showing your awareness of environmental issues and by letting others know what they can do to make a difference. Even small actions can have great consequences!

Earth Hour and Earth Day both serve as a reminder that there's a surplus of things we can do every single day to help our planet. It is sometimes hard to see what we, individually, can do. The main point of Earth Hour is to show the world that a solution to the world's environmental challenges is possible if we work on them together – together our actions add up!

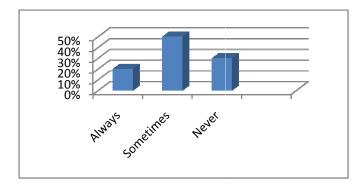
A survey

I have conducted a survey and interviewed around 30 people within 15 to 18 years of age. I have asked them questions about the Earth, its current condition, some things about living green and what kind of lifestyle they have in their lives. I have also asked them what they think we all should do to protect our planet and slow down many ecological disasters. In this survey I wanted to find out if teenagers care about the environment, what their lifestyle looks like and if they are interested in making a change.

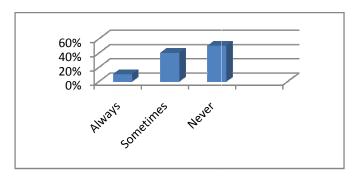
Are you interested in ecology?



How often do you turn off unneeded lights?



How often do you turn off TVs, computers when not in use?



To my surprise, I have concluded they all know what living green is, but nobody is doing anything about that. In addition to this, they consider the Earth's currently state poor and catastrophic and know what the major environmental problems are, but they just are not so familiar with what could be done and how.

CONCLUSION

What our society really lacks is ecological conscience. Many people think only of themselves, not caring for everything else that is happening on our planet. Each and every one of us must understand that we cannot survive without the animals and plants, and that with so many endangered plants and animals, things are not looking good for human population either. "Only when the last tree has died and the last river been poisoned and the last fish been caught will we realize we cannot eat money." (Cree Proverb)

This is really the main problem of humanity, the fact that we very rarely think about the future. What will we leave to our children if we continue with destruction of our planet? What will happen to the circle of life if many animals go extinct? How will humanity survive without animals and plants? Every person on Earth has the responsibility to do as much as they can to preserve the planet's natural resources today and for future generations. It has never been more important, or more urgent, for people everywhere to take personal action, to adopt a greener lifestyle, and to make small steps for better future. The more we give, the more we will get in return.

We all share the same planet. Sharing the Earth means taking the responsibility for what we use and how we use it. We all have to think of the environmental challenges we face and how we can solve them. Every person and every country has responsibility to protect one thing that unites us all - the planet!

CONTENT

Abstract	2
The Earth generally speaking	3
Deforestation	3
Animals	4
Global warming	6
Greenhouse effect	6
What are the effects of global warming?	7
Pollution	8
Living green	9
The three Rs	10
Green living tips	11
A survey	13
Conclusion	14

LITERATURE

http://library.thinkquest.org/C0111401/land_pollution.htm

http://www.netplaces.com/green-living/reduce-reuse-and-recycle/

http://www.wisegeek.com/what-does-living-green-mean.htm

http://www.ypte.org.uk/environmental/our-polluted-planet/34