# 'Young Journalists'



# The best article

### 1st prize

Jakub Frankowski - Gimnazjum nr 56,
 Bydgoszcz

### 2nd prize

 Marta Boryczka - Gimnazjum nr 1, Bydgoszcz

### 3rd prize

Dominika Kania – Zespół Szkół nr 10,
 Bydgoszcz



## 1st prize - Jakub Frankowski

# Young Journalists

#### Hybrid cars in the city.

How do they work?

Hybrid cars usually use one petrol engine and two electric engines. Unlike normal vehicles, hybrids are a lot more efficient in cities. But why?

Hybrids can cover small distances without using a petrol engine, so the fuel consumption could be very low (about 2l/100km). Electric engines get charged with the electricity produced during the braking process. Not using the petrol engine and letting electric engines work saves gas AND YOUR MONEY. Think about the planet! Hybrid cars produce less exhaust fumes.

Newly presented Prius Plug-in Hybrid is charged with an external source. Its range (using only electric engine) is twice as long as before, same goes to its maximum speed.

Their (Hybrids') cons are usually higher than usual price and mass. But, we can agree that with so many advantages, higher price isn't such a big deal.

Today's cars and other vehicles are getting better and better. Using hybrids cause air pollution to slowly decrease.

#### First hybrid vehicles

The first hybrid car's invention dates back to the early 20th century. It was made by Jacob Lohner and Ferdinand Porsche. It became world's first hybrid. Porsche faced the problem of keeping the batteries charged, so he added an internal combustion engine. It could achieve a top speed of about 60 km/h. Lohner and Porsche sold over 300 vehicles.



Written by Jakub Frankowski



# 2nd prize – Marta Boryczka



#### A hybrid car - just a car?

Have you heard of hybrid cars? Do you know what they are all about? Maybe your parents drive one. This week I would like to introduce the topic of nature friendly vehicles - apart from bicycles;)

Generally hybrid cars are equipped with internal combustion engine and a little electric engine. The second one can get back energy from braking, increase productivity of the combustion engine and reduce exhaust emissions by allowing to turning off the engine while layover. Thanks to this even including production costs and mischievousness, hybrid cars are a lot more environment friendly than cars driven only with combustion engine. Doesn't that make us think?

Is it such a new topic? It may seem that production of so economical and nature friendly machines is possible only by using the most modern technologies, but the first hybrid car was constructed in 1900 by Ferdynand Porshe and for many years a lot of constructors have perfected this project.

Today many economically developed countries want to use hybrid cars to help in environmental protection. Should we drive these cars? Yes! Let's look at the privileges.

In huge cities hybrid or electric cars owners rely on possibility of free parking on paid parking, entering a restricted traffic zone, free using the fast charging station or even introduced in Warsaw permission for entering a zone of the Royal Route. Commonly to receive these privileges hybrid car owner must have a special document, but there are different laws in different countries.

Hybrid cars are a big step in the direction of creation an economic and safe for nature world. They are becoming more and more popular because of their advantages and in the future they can even disown combustion engine cars.



autor: Marta Boryczka



## 3rd prize – Dominika Kania

### YOUNG JOURNALISTS

Hey, I am glad you are reading our school newsletter. This time I wanted to raise the very popular topic called a hybrid car.

Probably some boys may laugh, but I will tell you honestly I am a girl and the only thing that hybrids remind me of are nails. When I began to go deeper into this topic, I found that it is worthy of focus on that my article. Let me invite you to read it and I hope you will like it!

Dominika Kania



#### Hybrid cars in the city

#### WHAT IS A HYBRID CAR?

It is a car with standard engine and one or more electrics that makes this car better for our lungs, because it does not emit the exhaust fumes that cities around the world are currently struggling with. Cars with that kind of engine become more popular each year. Firstly they are good for environment and what is even more important for some people they bring savings. If every car with an internal combustion engine is changed for a hybrid, our air would get better and the driver's wallets would be thicker, because they would not have to refuel so often, but not everyone can afford to buy a car with such an engine. More and more cities in Poland give many privileges to users of that type of cars example is free city parking.

#### Hybrids are not only cars but also trucks, buses and tractors

People want to fight against urban pollution all over the world. That is why even public transport and vehicles that travel thousands of kilometers have hybrid engines to prevent pollution.

#### Curiosity

 Based on data from ACEA in the second quarter of 2017, as many as 102,969 cars with a hybrid engine were bought in Poland, Greece, Lithuania and Latvia

"Hybrid cars are so quiet that blind people consider them a security threat. President Bush does not understand this. He stated that maybe the blind should not ride them repeated" - Jay Leno

#### I THINK THAT:

Hybrid cars are the future of our civilization. Soon every car will have such a drive due to the bad impact of combustion engines on our environment. I think that this is a good solution because each of us should take care of the air that we breathe because after all, we inhale all these impurities every day.



# The best writing skills

### **Ist prize**

 Yunseo Choi – Gimnazjum nr 17 in Bydgoszcz

### **Commendation**

- Maria Erdman Gimnazjum nr 17 in Bydgoszcz
- Zuzanna Jandernal Gimnazjum nr 17 in Bydgoszcz



# 1st prize – Yunseo Choi

#### "The future of the hybrid car market"

The time of recent 100 years is the century of the fastest development made in the science technology history. During this period, we've managed to invent thousands of new technological masterpieces. One of them is a hybrid car now known as an invention which will help us to fight against greenhouse effect.

So how those hybrid cars differ from normal ones? It's all about the fuel which they use. Classic cars consume gasoline or diesel which changes into a well-known carbon dioxide after being used and pollutes atmosphere, while hybrid cars can be run by hydrogen, electric batteries or even water. They do not contaminate our planet so much like gasoline and diesel do. That's why hybrid cars are gaining more and more popularity now when the global warming is one of the biggest issues in the world. In some western countries like Canada, hybrid vehicles are already being used by public. For example, biodiesel hybrid buses are normally being driven in Montreal and nobody is surprised by them.

There are dozens of energy sources by which hybrid cars can be run. The most famous one is the electric energy, so I will mainly write about this kind of hybrid car.

Despite all those advantages, some people think hybrid cars are redundant on the modern market. Partly I understand them because of the short-life of batteries. But on the other hand, the ongoing depletion of fossil fuel in the 21st century has led to the active development of electric cars as means of alternative transportation. Along with this, the performance of its battery has been improved further through research and development. Even more, the battery market has been expanded across the world prompting domestic businesses to enter the global market. That's why many researchers predicted the generalization of electric cars a few years ago. And they were right! Now some European countries announced the illegalization of the diesel or gasoline-powered cars, which contributes to the further expansion of the hybrid car

Another obstacle to a generalization of hybrid cars is the price. Like all new technological gadgets, hybrid cars are quite expensive compared to diesel-powered ones. For example, the newest Tesla Model 3 costs about \$35000 which still isn't the highest price in the hybrid car market. However, this market is still quite new and keeps on expanding. It means that those new kind of cars will be generalized soon. Just like mobile phones which once were just luxuries and only richest people could get. But now barely after 15 years, they became a necessity. I'm sure it will be the same as those hybrid cars. It's true they're still too expensive for ordinary people, but within maximum 20 years, they will be common for everyone.

That's why I assume the future of hybrid cars very bright. There are a few defects, but as numerous scientists on the whole world are working on them, those problems will be solved out soon. So I'll be able to confidently speak that hybrid cars are superior to classic ones.



## **Commendation** – Maria Erdman

#### Hybrid cars - a sustainable solution or a waste of money?

Sustainability is the new watchword these days. We develop more and more inventions in order to protect the environment, but what about the recent craze – hybrid cars? Are they really eco-friendly or is this just a sales pitch?

First of all, what hybrid cars? Some people may be seeing this name for the very first time. Basically, these are vehicles that use a combustion engine and an electric motor. This is why they are considered to cause less pollution than traditional cars. But do they really have a good influence on the environmental pollution level?

According to my research, hybrid cars do emit less fumes. But what about the electric motor? It needs a source of energy. We need to be concerned about the choice of the source of energy since there are many of these. If the electricity that fuels the motor is produced, for instance, in a coal-fired power station, it can be more harmful to the environment than traditional petrol-powered vehicles. We may save on tailpipe emissions, while we can increase the level of pollution caused by power plants.

Moreover, batteries used in electronic vehicles use large amounts of elements such as nickel, lithium and cobalt. These metals are not toxic enough to cause serious harm to the environment themselves. However, the mining of these elements has a bad influence on the environment.

Furthermore, hybrid cars are a relatively new technology. We cannot be sure about the impact of disposal of batteries used in electric vehicles. It might turn out to be seriously damaging to the Earth.

Summarizing, hybrid cars are meant to be sustainable, which they seem to be at the very first sight. They emit less fumes and may even be more efficient than traditional petrol powered cars. However, we need to remember that while we save on tailpipe emissions, we can still cause serious harm to our planet in many other ways.

By: Maria Erdman



### **Commendation** – Zuzanna Jandernal

#### Hybrid cars in the city... Yes or no?

27.02.2018

Did you hear about hybrid cars? They are not as common as cars propelled only by combustion engine. However more and more people are buying them. But why are they buying hybrid cars? Is it because of fashion or need to be unique?

There are various benefits of hybrid cars. The main advantage is that they are failurefree. They are devoid of complex injection systems, alternators and dual mass flywheels, which can be destroyed in typical cars. There is also smaller usage of brake blocks and brake disc. Another benefit is drive comfort - the car is more quiet than typical one. The thing that can amaze drivers is lack of vibration while driving. The only thing you can hear is a noise of tyres. Even engine is inaudible! The next advantage is regenerative braking system. If we get stuck in traffic jam, the engine will turn off, but when we have to drive few metres, it will not turn on, because of supply of energy in battery. Apart of this, hybrid vehicles have lower fuel consumption in the city which means that an expert driver can use only 41/100km. Imagine that you are an owner of the hybrid car and annually you drive about 15 000 km. For spending on fuel you will pay around 2300 zloty, which is less than if you had a car with a combustion engine (you would pay 3500 zloty) or even a diesel car (then you would pay 2380 zloty). Furthermore the prices of hybrid cars are comparable to typical cars. The last but not least advantage is that hybrid vehicles are environment-friendly. CO2 emission is reduced by them, therefore lots of cities decided to change typical buses into hybrid ones because of polluted air. Also in many countries there is a problem with smog and too large number of cars in the city centre so environmentalists encourage citizens to resign from cars in favour of municipal public transport.

Opponents point out that there are a few significant drawbacks of hybrid cars. For example hybrid vehicle has a less commodious boot. It is because of battery which is located inside it. In addition mass distribution is not regular, because the battery is heavy, which makes car quite oversteer. Moreover, hybrid cars are said to be not for every driver. If you are temperamental driver, you will be disappointed, 'cause in typical hybrid models, where is about 136 horsepower, speed to 100 km/h last longer than in cars propelled only by combustion engine. Lots of men would refrain from buying hybrid cars, cause in Poland it is common opinion, that those vehicles are not masculine enough, because of their performance.

It is clear from above evidence that hybrid cars have lots of benefits and drawbacks. Personally, I reckon that all those advantages better disadvantages and make those cars unique. They are so unusual that even an experienced mechanic said: "Not even once had I ever seen that type of car in my car shop". In spite of that, I wish I had hybrid car one day. And you?



by: Zuzanna Jandernal

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