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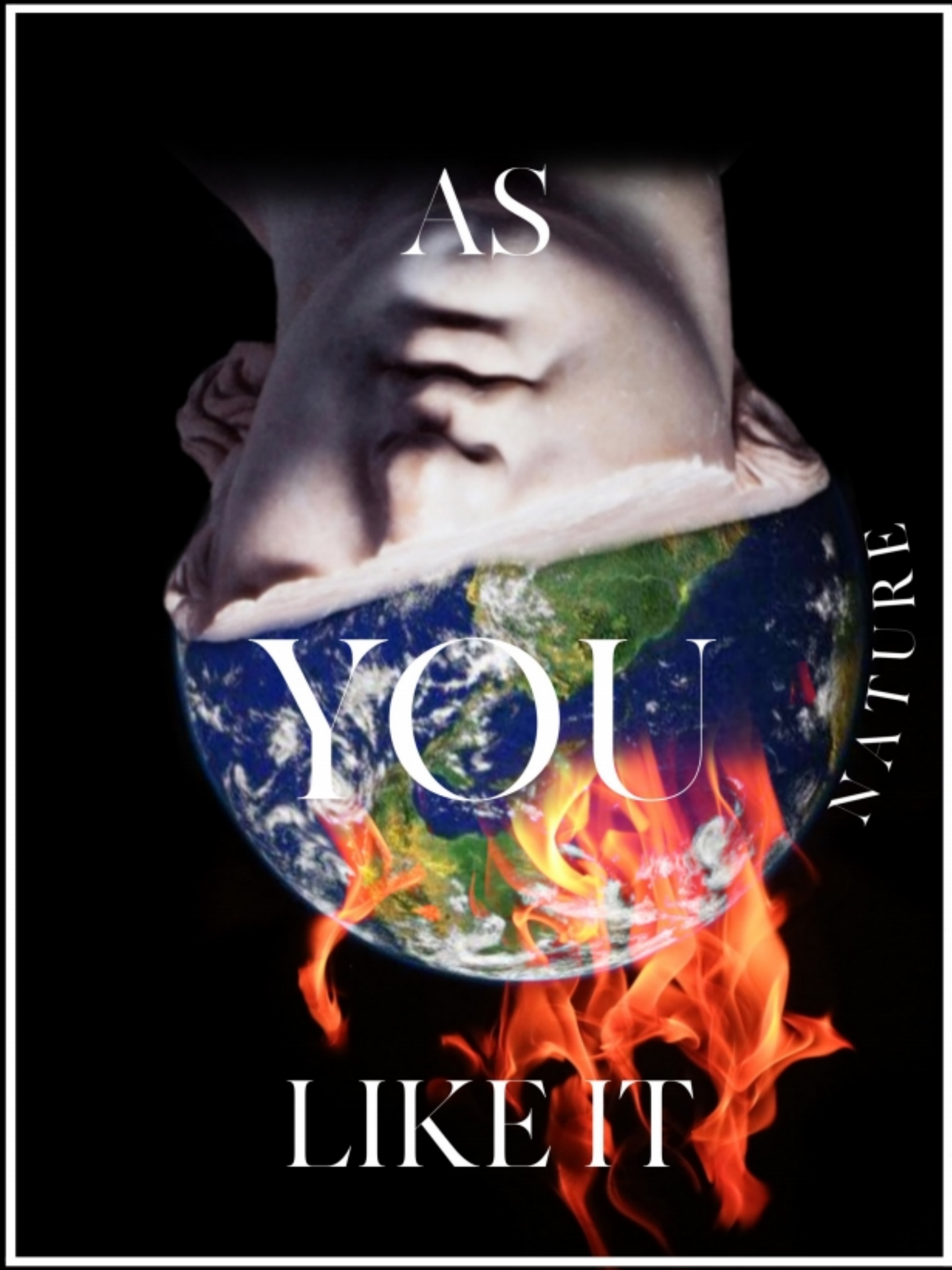
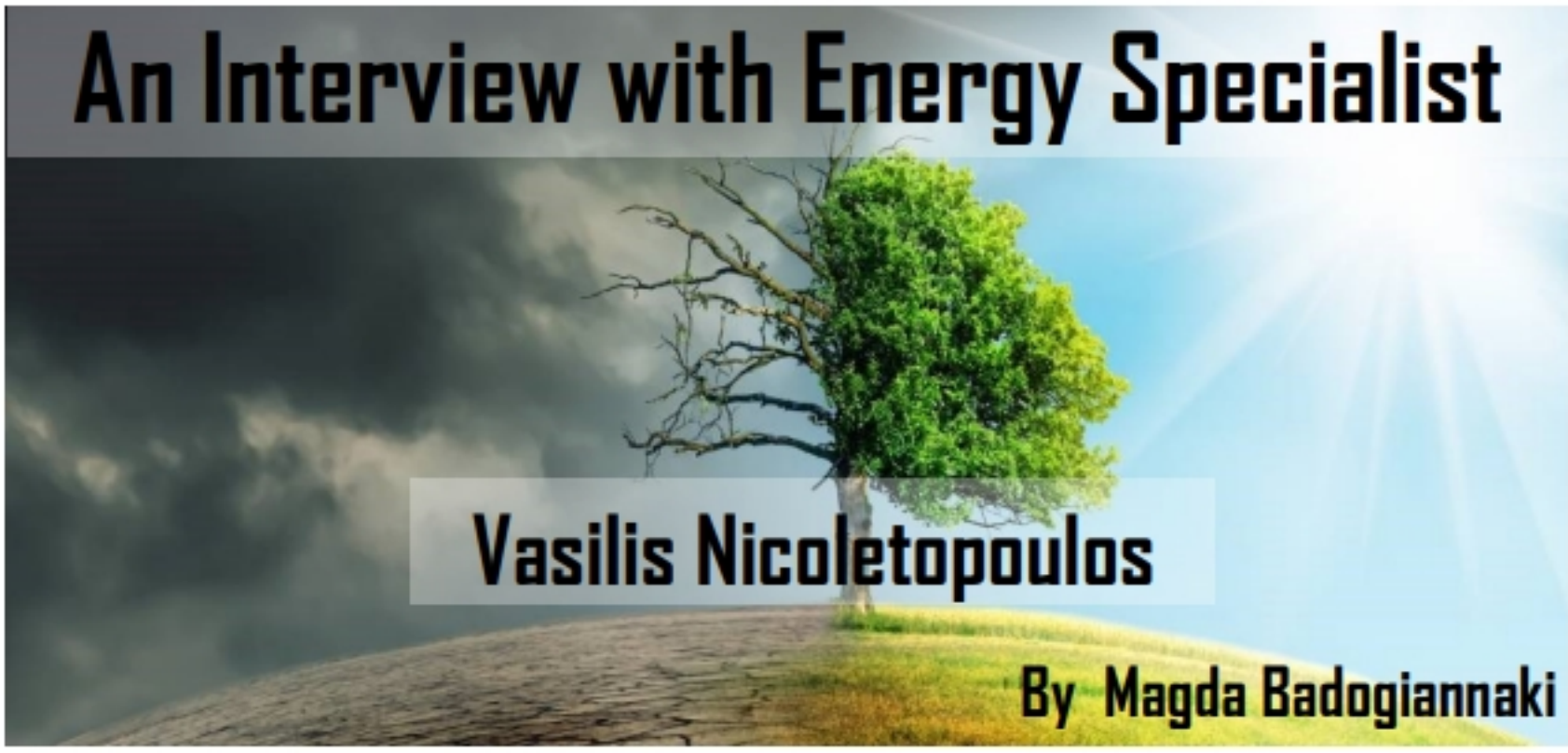


An Interview with Energy Specialist



Vasilis Nicoletopoulos

By Magda Badogiannaki

I recently had the opportunity to interview Mr. Vasilis Nicoletopoulos, the founder and main shareholder of Natural Resources, PC, a business consultancy and brokerage company on industrial and commercial development affairs, which specializes in basic industry sectors, such as mining, metallurgy, and renewable energy. As a member of the Energy and Climate Committee of Euromines, the European Association of Mining and many other industries, he shared his knowledge of matters related to climate change with me.

In your opinion, what are the most important dangers when it comes to climate change?

We need to start with a question: does climate change really exist? Recently, it looks like it does. The problem here is that we have scientific measurements for just the last 150 years and even though for us, humans, 150 years is a long period of time, for climate change, it is a really short one. Similar phenomena existed before statistics. For example, glaciers melted hundreds of thousands of years ago, way before the Industrial Revolution, while cultures in Mesopotamia became extinct due to climate change. That leads us to the question of whether climate change is human induced or a phenomenon of great importance. At first, scientists called it "Global Warming," but later on, we realized that it wasn't always warming, but it had to do with severe temperature changes, massive hurricanes, and deadly colds, and so a more general name was given: "climate change."

Dangers from climate change, if this phenomenon continues, are the following: 1) some countries are going to become deserts, 2) some others are going to "drown" because of the rising sea level, and 3) the consequence of these first two will be large movements of populations as their countries will not be viable. In my view, these three are the most important dangers.

Climate change, as you have already mentioned, is a widely discussed subject in the 21st century, and there are many interpretations concerning its severity and threat to the world. Do you believe that climate change is absolute or that different interpretations can also be taken into consideration?

Mr. Vasilis Nicoletopoulos speaking at the European Business Mining Forum.

It's true that there are many interpretations of this phenomenon, and that is because it is not absolute. The interpretations fall into two categories: firstly, if it really exists and to what degree, and secondly, if it is human induced and what can humans do about it. Everyone has accepted the fact that climate change is here, especially over the last few decades, but I'm not really sure if it is more severe than before we started recording scientific measurements.

It is an incontestable fact that human activity has had a great impact on climate change. Are there other factors that contribute to climate change, as well?

Certainly, there are two great ones. The first is the sun's thermal activity. The sun, as you know, is the most important source of energy for life on Earth, and it is responsible for the temperature regulation of our whole galaxy. However, our North Magnetic Pole moves by tens of kilometers every year, and this affects the sun's activity on our planet. Since the sun controls the Earth's climate, it impacts climate change. The second one is the eruptions of volcanoes. The gases and dust particles ejected into the atmosphere during volcanic eruptions greatly impact the climate and can cause global warming.

It seems that climate change is a complex situation. How can humans cope with climate change?

Now, we reach another question: to what degree is climate change human induced? As an engineer and economist, I tend to quantify things. Mr. Zerefos, Nobel Prize holder and expert on the physics of the atmosphere and climate, has given many interviews in which he talks about human activity and climate change. In some, he mentions that humans are responsible for 20%, whereas in others, 50%. Let's say that the human impact on climate change is 30%, and the rest is the result of the factors previously mentioned plus animal activity. Animals play an important role as they emit methane which is many times more dangerous than carbon dioxide. My "educated guess" would be that human impact is less than 50%.

What can we do to stop it? The first thing that an individual can do is nothing! The famous do-nothing alternative! An individual can sleep and think that climate change is a problem concerning the distant future, and so future generations should deal with it.

The second alternative is a more gracious one. As a friend of mine used to say, "Even if human activity doesn't impact climate change, what are we going to tell our children? That we didn't do anything because we thought that it wasn't true or because we doubted it?" Even if we have doubts, we need to do something about it.

The World Meteorological Organization's outline of climate risks and related impacts.

So, what can an individual do to stop this phenomenon even though he has doubts or is responsible for less than 50% of the problem? Two kinds of actions can be applied: The first is technocratic measures, like the limitation of emissions in industries, obliging them to pay fines for each ton of heat-trapping greenhouse gases that they emit. This is also called mitigation. The European Union has taken many measures that are entrepreneurial. China, as well as many states in the U.S., is also following these regulations, believe it or not. That is a technocratic measure that has been applied to many countries.

On the other hand, another alternative is that humans change their way of living. That means that they will not move around, or they will move around less using environmentally-friendly means of transport. They will stop eating red meat as in its production process, significant gas emissions happen. They will recycle much more than they do today. They will reuse things, such as wearing the same clothes. So, there are many things that people can do, from industrial work to individual activity.

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Do you believe that using more technologically-advanced units, machines, and industrial installations that are more ecofriendly could help eliminate climate change?

Yes. A great part of the European's Union and the UN's deal concerning climate change has to do with the reduction of emissions, the increase in energy efficiency, and the use of renewable sources of energy. In order to achieve these three goals, which are strongly connected, new technology, software, and hardware are required. Companies are working towards "doing more with less."

Greece is one of the countries that signed the Paris Agreement on the 22nd of April, 2016. Do you believe that our country has taken the appropriate steps to eliminate climate change?

The government has taken drastic measures to stop climate change, especially by announcing the closing of the lignite power plants in Macedonia and in the Peloponnese in the next 4-5 years, even before Germany plans to do so. However, this will cause many technical, economic, and social problems that need to be solved. Also, the government has given significant emphasis to the importance of green transportation means like electric cars and electric buses. If these measures are actually realized, the answer to your question is yes. At the same time, let's not forget that agriculture and stockbreeding are two sectors that contribute a lot to gas emissions but because of social preconceptions, it is almost impossible to deal with.

Do you believe that there are any optimistic messages you can give us on climate change?

The first optimistic message is to keep calm. The second is that climate change has been around before the statistics of the last few decades. The third is that, for the most part, it's not our fault. The fires in Australia are causing tremendous climate change. To the degree that humans are responsible, they must take certain measures. The European Union, the leader in this effort, has taken drastic measures, but Europe constitutes only 15% of Earth. If the remaining 85% ignores climate change, then this phenomenon will never be stopped. Overpopulation, which mainly exists in underdeveloped countries, is certainly an increasing environmental burden and should be controlled by cultural means. An optimistic message about climate change would be that we need a change in our way of thinking.

Closing this very interesting interview, I would like to ask what you would suggest my generation do differently from previous generations.

First, learn and be objective; don't get carried away by unfounded views. Second, be optimistic. Third, try to change your way of living—you cannot drive an SUV in town and preach about climate change. Fourth, educate the underdeveloped world about the issues of climate change.

"An optimistic message about climate change would be that we need a change in our way of thinking."