UNIT 8 SPEAKING TEST

QUESTIONS

- 1. Talk about global issues. Name problems and their causes. Suggest possible ways of improving the situation. Can you personally do anything to help the environment?
- 2. Do you think tourism and sustained environment can peacefully coexist? What do you think about ecotourism?
- 3. Tell a story about an extraordinary person (people) who took up an arduous journey to pursue a certain goal. Did they make an example to inspire other people?

SPEAKING PLANS

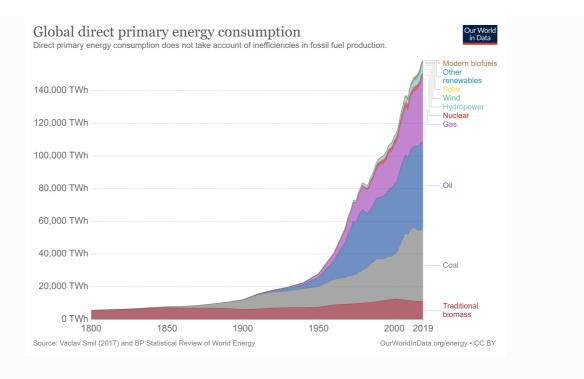
1. Global Issues

Today I'll be trying to speak about the issues, that are usually not spoken about, but really question the survival of humanity.

Energy resource exhaustion

The first one is the absence of an energy source that's able to supply the humanity for a long enough time.

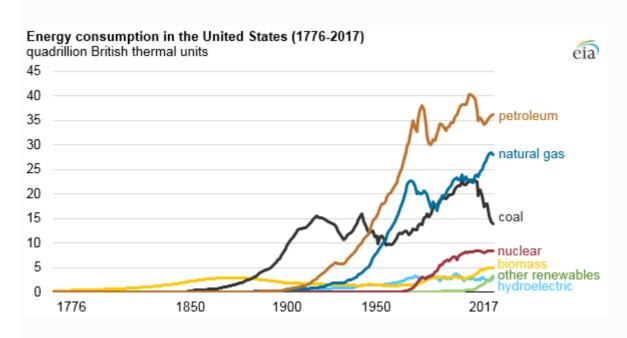
To start with, let's look at *«global energy consumption by source»* diagram:



The vast majority of energy produced in the world at the moment is old-fashioned and non-renewable.

We can clearly see, that, regardless of the popular opinion that we'll soon live in the era of green energy and all problems will be easily solved («we only need just a bit of democracy»), the fraction of those renewable sources is still miserable in terms of all the word energy production and consumption.

Is it still caused by dictators? Ok. let's look at the USA. The situation is basically the same there.



For example considering the humanity to consume oil with the same speed, its reserves will expire in \approx 47 years.

(https://www.worldometers.info/oil)

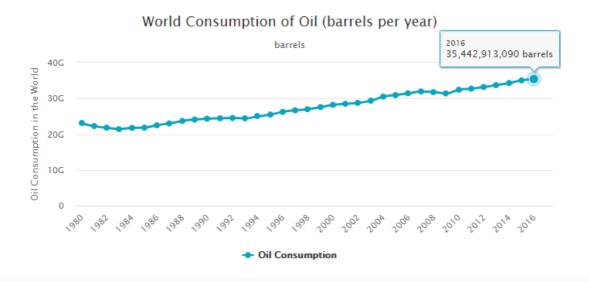
Oil left in the world:		
1,480,673,351,701		

Summary Table		
Oil Reserves	1,650,585,140,000	barrels
Oil Consumption	35,442,913,090	barrels per year
	97,103,871	barrels per day
Reserves/Consumption	47	(years left)

(Data shown in the table is for 2016. Counter shows current estimate.)

But taking the fact, that oil consumption is only increasing, into account, it becomes obvious, that the end of the petroleum era is even closer than many scientists think.

History of Global Oil Consumption



The situation with other traditional energy sources is not significantly better.

But why is the green energy still catastrophically unpopular among «big people»?

The efficiency of an energy source is defined by the ERoEI index:

$$ERoEI = \frac{Energy_{returned}}{Energy_{invested}} \tag{1}$$

It's said, that if the weighted average of ERoEI by energy sources is lower, than If 8, it's practically useless to try to extract this type of energy.

Energy, EROI and quality of life [☆]

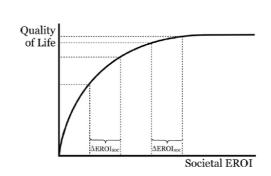
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HIGHLIGHTS

- Large quantities of high quality energy appears to contribute to social wellbeing.
- LEI examines the quantity, efficiency and distribution of energy within the system.
- EROI_{SOC} of < 25:1, < 100 GJ/capita and LEI < 0.2 point to poor/moderate quality of life.
- A threshold of well-being is: EROI_{SOC} of 20–30:1, 100–200 GJ/capita and LEI 0.2–0.4.
- Improvement in well-being levels off at: EROI_{SOC} > 30:1, > 200 GJ/capita and LEI > 0.4.

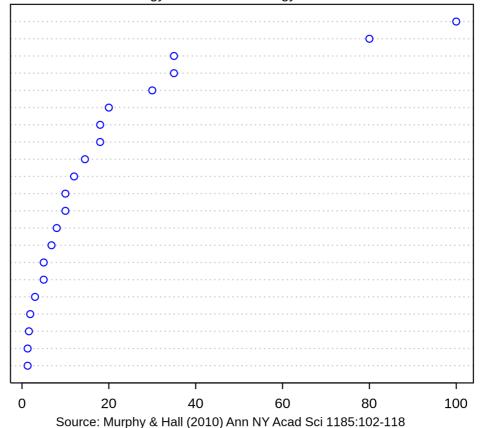




And the problem of the vast majority of renewable energy sources is that the ERoEI index for them is below the threshold! As for the Hydro energy, its problem is in its boundedness. There are not so many rivers in the world!

EROI - USA
Ratio of Energy Returned on Energy Invested - USA

Hydro Coal World oil production Oil imports 1990 Oil and gas 1970 Oil production Wind Oil imports 2005 Oil and gas 2005 Oil imports 2007 **Nuclear** Natural gas 2005 Oil discoveries **Photovoltaic** Shale oil Ethanol sugarcane Bitumen tar sands Solar flat plate Solar collector Ethanol corn **Biodiesel**



Actually, the «green energy» is simply unprofitable and can't live without active monetary government support. But it still doesn't mean, that we should just nationalize the means of production and everything will go the good way. This won't eliminate the main problem of most renewable energies: they are unprofitable comparing with traditional energy sources!

highly desirable traits of non-renewable fossil fuels. Specifically, renewable energy sources:

- are not sufficiently "energy dense",
- tend to be intermittent.
- lack transportability,
- most have relatively low EROI values (especially when corrections are made for intermittency), and
- currently, lack the infrastructure that is required to meet current societal demands.

To sum up, the problem of Earth pollution by traditional fossil fuels still exists, but there is even a bigger one, which is more dangerous for the humanity. We basically have two ways:

- 1. To invent a method of low-energy nuclear reactions and continue the technological progress.
- 2. To degrade and realize that the principal difference between this moment and the historical one with the same level of organization is the absence of resources in the depth of the Earth.

Anyway, composting may be useful in both cases:



If you personally want to help the world, you can either try to develop a method of conducting low-energy nuclear reactions or promote the integration of organic rubbish recycling through composting. The other way is to promote awareness of this particular issue and the next one.

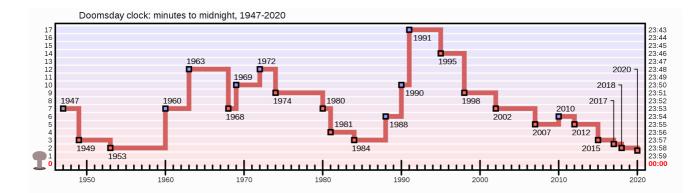
As for me, I'm trying to apply the second and the third methods. They seem to be easier for me...

The **Doomsday Clock**

Speaking about global issues, we can't pass the DoomsDay Clock by.

The **Doomsday Clock** is a symbol that represents the likelihood of a man-made global catastrophe. Maintained since 1947, clock is a metaphor for threats to humanity from unchecked scientific and technical advances. The clock represents the hypothetical global catastrophe as midnight and how close the world is to a global catastrophe as a number of minutes or seconds to midnight, estimated in January of each year. The main factors influencing the clock are nuclear risk and climate change (actually, global warming).

As we can clearly see, the contradictions between the imperialists are only increasing nowadays.



At the moment the symbolic time is 100 seconds to midnight. Never had the clock been such close to **the end**...

If you want to help the humanity with this issue, you need to sacrifice yourself, because it's quite dangerous to fight with imperialism nowadays.

2. Peaceful tourism's and sustained environment's coexistence

Do I personally think if tourism and sustained environment can peacefully coexist or not?

The short answer is «Yes, but...».

I've still not lost the faith in the humanity and I believe (I have a dream!.....) than one day people will become conscious enough to sustain the environment during the tourist activity.

I have a dream, than one day people will realize, that saving the nature is an existential problem for the humanity and stop the predatory relationship with nature and stop exploiting it for personal benefit.

I have a dream, than one day social interests will be valued above private interests and we'll manage to cope with the all the issues together.

But what is the real situation with sustainable tourism at the moment?

As more regions and countries develop their tourism industry, it produces significant impacts on natural resources, consumption patterns, pollution and social systems. As tourism grows so do the impacts!

International tourist arrivals have increased from 25 million globally in 1950, to 278 million in 1980, 527 million in 1995, and 1.32 billion in 2017. They are expected to reach 1.8 billion by 2030.

So, what are the issues?

An enormous amount of words are said about it, but we still need to perform dozens of work.

Here are some unsatisfying facts and numbers:

- A species of animal or plant life disappears at a rate of one every three minutes
- 70% of marine mammals are threatened
- More than 80% of the worlds coral reefs are at risk. Nearly 2/3 of Caribbean reefs are in jeopardy and it is reported that 90% of coral reefs will die by 2050
- By 2050 climate change could have directly led to the extinction of 30% of species, the death of 90% of coral reefs and the loss of half the Amazon rainforest.

To sum up with, there are can be some perspectives of coexistence of tourism and nature protection, but only in distant future.

Arduous journey

Tell a story about an extraordinary person (people) who took up an arduous journey to pursue a certain goal. Did they make an example to inspire other people?

I'd be happy to forget that.

When I remember, it gives me the creeps,

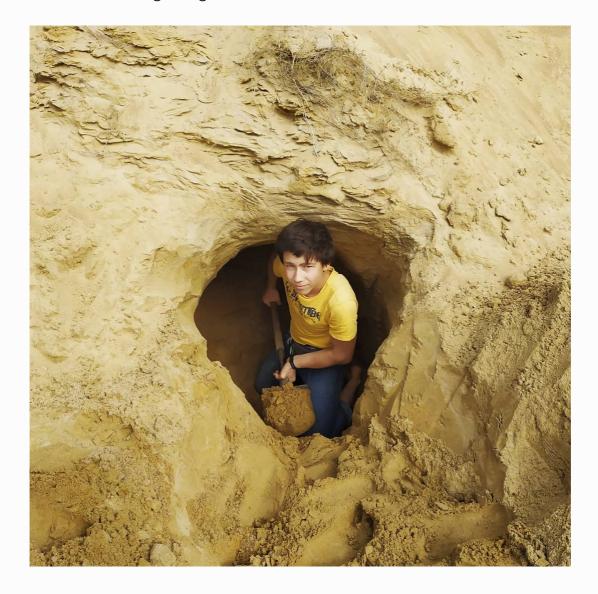
But I will tell you everything as it was -

I'm tired of your sour faces...

Once upon a time there were two extraordinary people. Me and my classmate. And the didn't have any ideas about what should they do in a really long summer. The decision was to go to a nearby career and try to dig a sandy cave using a shovel.

As the main transport, we've chosen bikes (because the career was so far from the summerhouse) and it was quite a challenge to tie the shovels up.

It took us ≈ 2 hours to dig the grave cave. And this is how it looked:



I've published this photo in the internet and there was somebody who wrote me that he was planning to perform a suicide and I had inspired him to kill himself this way: big digging himself into a cave and die of suffocation.

Fortunately, when I came to school, one of my classmates acknowledged me, that it was only trolling by him!