

didate at the University of Tamkan in Taiwan, recently wrote in World Security Network that helium 3 could be extracted by heating the lunar dust to around 600°C, before bringing it back to the Earth. The gas, he estimates, has a potential economic value of \$3 billion (£1.78 billion) a tonne, making it economically viable to consider mining from the moon. According to experts in the U.S., the total estimated cost for fusion development, rocket development and starting lunar operations would be about \$20 billion (£11.8 billion) over two decades.

China has expressed an interest in mining of the moon for this substance, but the nation hasn't set forth any concrete plans yet. If China does get Helium 3 from the moon, it insists it will be for the benefit of humanity. But given the absence of competitors in the endeavor, there is speculation that China would have a monopoly over the resource.

Celestial bodies closest to the planet Earth have plenty of opportunities for mineral exploration, utilization of new materials and alternative clean energy, they also possess a reserve of materials that are depleted, near depletion or very scarce in planet Earth. The exploration and exploitation of these resources today present great technical difficulties but due to current technological advances and the high prices of minerals and energy, this exploitation is getting closer to being economically and technically feasible.

The engineers of the current generation must be alert to new possibilities that do not limit us to think only of Earth's resources and to open our minds to new possibilities and alternatives.

THE PROBLEM OF ENERGY SAVING MODERN CRIMEA

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At the moment the increasingly popular concept of sustainable development of modern society. The essence of this concept is to create a balance between society and the biosphere, by optimizing the use of natural resources and respect for nature. To date, there are several factors that affect the establishment of equilibrium. One of these factors, according to scientists, is energy saving.

Feature location of the region, as well as a special sphere of activity obviously requires the use of clean energy sources. Of course, in this situation, the most advantageous is the use of alternative energy sources that will make the region's energy independence and contribute to solving some of the problems associated with limited natural resources and the fight against pollution. All this requires the introduction of new technologies, facilities and equipment, with the daily accumulation of heat, which would allow for a profitable economic activity and extend the boundaries of the service area of the resort. In turn, a set of alternative energy sources and energy efficiency will get rid of wasteful energy use and improve the environmental situation in the region.

To realize all this requires the acceptance of a series of measures, both from the government and from the business, but the main role in the development of energy in JSC Crimea should take the state, as is done in many foreign countries. Policy-based energy saving must become the main socio-economic strategy for the coming years. All this requires a joint effort of international organizations, governments, the public, and a number of specialists, a huge time and material costs. It requires highly educated professionals who understand the environmental pollution problem, thinking globally, having special ecological culture and philosophy.

LITERATURE:

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TRAVERSE ELECTRIC DRIVE OF TURNING LATHE

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The topic of my report is an electric drive of traverse of turning lathe. As science and technologies developed electricity started to take a special place in everyone's life. How can we live without domestic appliances, TV, radio and other everyday things? This list is endless because we use electricity everywhere and manufacture is not an exception to this rule. That's why I'd like to tell you about electric drive. It's clear that electric drive is something that can provide us with electricity but the certain definition is that it's a special controlled system which transforms electric energy to mechanical and vice versa. The aim of this report is to make a research on an electric drive of traverse of tuning lathe.

The lathe machining is to do metal cutting using turning lathe. Such machines are used to manufacture of solids of revolution. Processed detail is being hardened and given a high angular speed. After that cutter is moved to detail with the help of cross travers and travers. The most useful details for this work are shafts (radius is much bigger than the length), disks (length is much bigger than the radius) and sleeves (hollow center).

Now my speech will be devoted to traverse. If we want to realize it's meaning, firstly, we should divide it into parts. All parts are shown on the slide. But division is not enough to understanding. Let's discuss the kinematics. First of all, we start the engine, after the move goes to the headstock lathe using belt transmission. The headstock lathe brings the detail in action. Moreover, on this step we set settings for turning. After the move goes to speed gearbox through the "guitar". On this step we set a speed of cross travers and travers. Then move goes to saddle which slides on feed