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ENERGY IN HUMAN LIFE

Formulation of the problem. How much energy does a person use?

Figure 1. Usage of energy

Energy is necessary for the existence of any form of life and all types of civilizations. There is a direct relationship between the amount of energy used and the level of development of civilization. As for ancient people, so for us, modern consumers, energy is a means of improving the quality of life [9].

Presentation of the main material. In physics, energy is a quantitative property of objects involved in various types of interactions. There are many forms of energy that can be transformed into each other during interactions.

Note:

1. Energy is a quantitative property of objects involved in various types of interactions.

2. Inside a closed system, energy passes from one form to another. The total amount of energy in the system does not change [2].

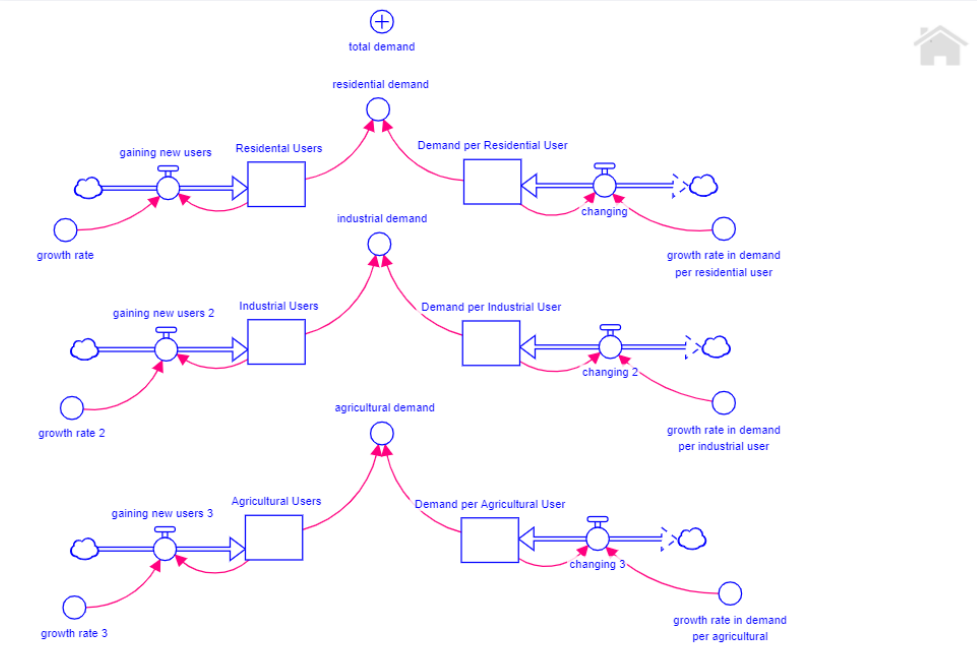

Figure 2. System Dynamic Model

This model explores the demand dynamics for a state's energy usage. For three sectors (residential, industrial, and agricultural) you can adjust the size of initial user base, the growth rate for the number of users, and the rate for the change in demand per user.

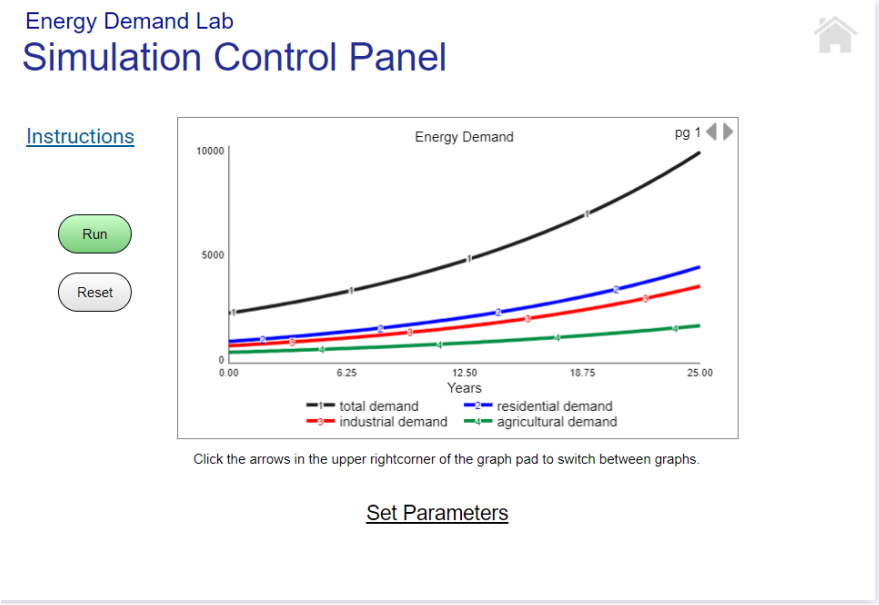

Figure 3. Energy Demand Lab Simulation

This Energy Demand Laboratory allows you to analyze various energy demand scenarios.

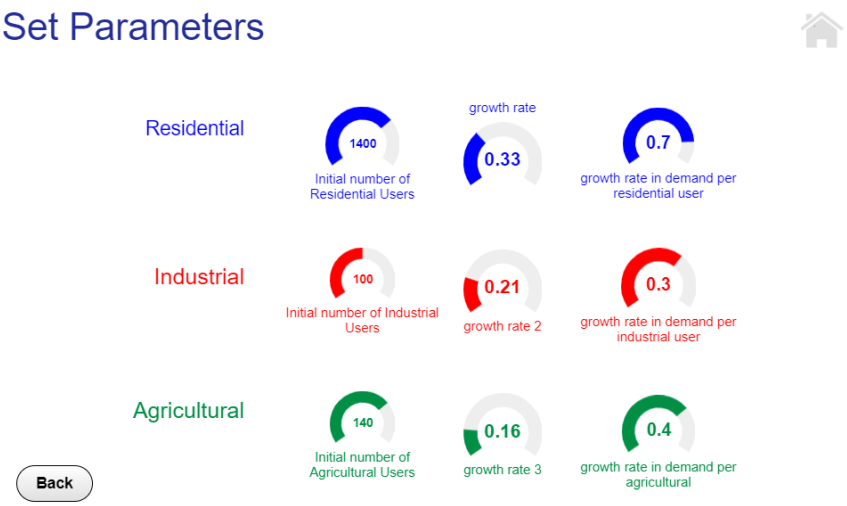

Figure 4. Parameters' Setting

Use the "Set Parameters" area to set initial numbers of users, user growth rates and changes in demand per user. Then run a simulation to graph the change in total demand over a 25 year period.

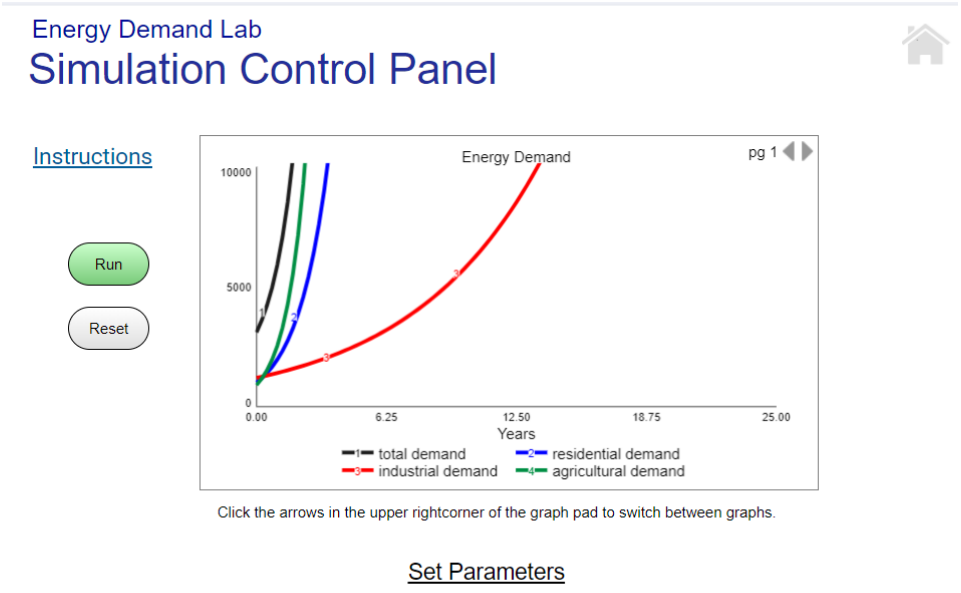

Figure 5. Dynamic of variables

"Energy is measured not only in joules, but also in courage, ingenuity and progress" Marie Curie.

Conclusion. As for ancient people, so for us, modern consumers, energy is a means of improving the quality of life. We have already realized that any activity, regardless of its nature, involves the use of energy. By nature, a person is physically too weak. But people have the ability to think, and this has allowed them throughout the history of existence to create various devices to use sources of energy more powerful than muscle energy to achieve the desired results with their help.

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