

# **Alternative Methods of Obtaining Electricity for Active Tourism**

Andriy Protas, Lyudmyla Yurchuk

*National University of Food Technologies*

**Introduction.** During the advanced communications technologies and systems, most of the people used to look for the right information in the global network or use communication systems and navigation. These systems facilitate our lives, but they need a constant supply of energy sources. In terms of long-term travel in nature are not often able to charge your equipment even on diesel - generators that can be completed in gear. To resolve this issue want to offer the use of so-called "Peltier element" in Figure 1.

Portable generator will use matched temperature combustion of solid fuel (wood) for electricity will increase the autonomy of the devices of tourists.

The principle of operation of the generator in the temperature difference between the sides plates. In modern electrical element that is used for cooling, because the connecting element to feed one side is heated and the other cooled by allowing to reduce the size of cooling systems. But this process can occur and vice versa. If you heat one side of the element by fire and the other cooled using liquid may get electricity will be enough to recharge the phone, flashlight and radio.

**Conclusion.** Using this principle and design solutions possible cheaply and efficiently produce electricity in places where it may be needed. This method can play an important role in rescue operations, which would charge the radio, thereby save the lives of people and protect their health.

## **References**

1. Peltier element - [https://uk.wikipedia.org/wiki/Елемент\\_Пельтье](https://uk.wikipedia.org/wiki/Елемент_Пельтье)