Alternative energy

Alternative energy sources are the future of any country. This is an important component in the global sense. Not all countries can start using *wind energy*, for example, at a rapid pace, but there is no alternative. All **alternative energy** is being built gradually.

Alternative energy includes all energy sources that do not use fossil fuels. These are solar, wind, geothermal, and other types of energy sources.

There are various special mobile **containers** that allow you to quickly deploy the power plant on alternative sources and provide the necessary energy. They work by obtaining solar or wind energy. **Containers** are easy to quickly move and place anywhere.

Such **containers** can perform other functions depending on the needs of mankind. Will be useful for private entrepreneurs. Various programs for housing and communal services are currently being developed. **Containers** for various purposes should also be considered in the planning of work. The **distributed energy system** will allow not only individual cities to gain energy independence, but also neighborhoods within the city, in settlements, etc. For example, if a village wants to afford to **live independently of the central grid**, it can deploy an **alternative power plant** and even sell **alternative energy**. It is clear that it is impossible to build the required number of solar power plants or install an **autonomous solar system** in a short time, but this must be done. For now, you can use **mobile containers** for quick response.

Inverter for autonomous solar systems

The **inverter** for solar batteries converts direct current into alternating current. By type of use **inverters** are divided into:

- network (on grid);
- off-grid;
- multifunctional.

The multifunction **inverter** is the most expensive, but it has many settings, it combines the advantages of the first two and is considered the best. It is important to choose the **inverter** and the output voltage. If the house has sensitive equipment to voltage drops, you need to choose a quality **inverter** and other equipment.

To live **independently of the central network**, you need to spend a lot of money. But it's worth it. You need to consider various indicators, such as total power consumption. The geometry of the output signal is important for the choice of the i**nverte**r. In terms of power, the power of the converter should be 25-30% higher than the total power of simultaneously operating consumers. **Inverters** are divided into:

- single-phase;
- three-phase.

The optimal value is the installation of one **inverter** for every 5 kW. That is, there may be many more than one, but one is usually enough to solve household problems. It is important to connect the equipment correctly. The efficiency of the entire **autonomous solar system** will depend on this.

Also for safety reasons, when installing the i**nverter**, the network is equipped with circuit breakers. Charging the **Battery** is controlled by the **charge controller**.

To provide sufficient power for a large house with a variety of appliances requires approximately 25 kW. That is, such **hybrid inverters** will need to be purchased. But the numbers are relative. To determine exactly how much to expect and what equipment to buy, you need to contact specialists. If you can install a **hybrid inverter** yourself and set up other equipment as well, it's worth a try. Keep in mind that an incorrectly installed **hybrid inverter** will either not work at all, or break down quickly, or significantly affect performance.

Question: Is it worth trying to set up the system yourself, if I know electricity well?

Answer: the connection of alternative energy sources has its own characteristics, but you can understand them yourself.

Battery for life without mains

The **battery** is an intermediary in obtaining electricity. It allows you to use household appliances in the house for some time. **Battery** life depends on its capacity. Residual energy accumulates as a result of work during the day and a person can freely use light at night. The **battery** is charged by the operating currents of the solar panels. It is characterized by the following indicators:

- capacity;
- device type;
- energy density;
- self-discharge;
- temperature and atmospheric modes.

A **battery** is a reusable device. You need to organize the right care for him. Important parameters when choosing a **battery** are:

- capacity;
- output voltage;
- chemical composition.

If the industry uses powerful power consumers, such as *electric arc furnaces*, then there is no such power consumption in the home and it is possible to use a **stand-alone mobile hybrid power plant**. It will help to provide voltage to some neighborhood depending on its needs and its capacity. For example, a **stand-alone mobile hybrid power plant** can be built on agricultural land.

For solar panels, **batteries** are used to store energy and in the operation of **solar wind hybrid power plants**.

Our company operates successfully in Ukraine, whose specialists have solid experience and are ready to build a turnkey **autonomous solar system**. We will help you choose the necessary equipment, tell you how the **charge controller** works, install the **battery**, bring a ready-to-use **container** and configure everything.

Our specialists will provide comprehensive advice on the proper operation of equipment, including **batteries**. There are various nuances, so without the help of specialists it will be quite difficult to perform this work in person. We do not recommend hiring people without special knowledge and experience. The equipment is expensive enough to take a risk. And if you need a turnkey **solar wind hybrid power plant**, you need to get some guarantees. We provide such guarantees for our works. Therefore, both the **battery** and everything else will work like clockwork.

Charge controller for mobile power plant

The **charge controller** is not just a printed circuit board. They are needed to control the batteries. There are:

- ● MPPT;
- ● PWM.

Also, the **charge controller** comes in different models, for example:

- ● ABi-Solar MXC 3kW;
- ● C&T Solar Mizar 3024;
- ● C&T Solar Acamar 60;
- ● C&T Solar Fusor 1024 PWM charge controller for street lighting;
- ● C&T Solar Pulsar 3024 and others.

LED lamps are often used as indicators. In addition to the basic functions, the **charge controller** is able to solve the following issues:

- ● control of outdoor lighting lamps;
- ● battery discharge notification;
- ● remote data transfer.

If you decide to abandon the **central network**, you need to calculate everything correctly. Such a case requires study and project preparation. We propose to install a turnkey **mobile power plant** in a short time. We work exclusively with compliance with joint decisions. **Alternative energy** does not like mistakes. We offer to do everything right. Then work or **live independently of the central network** will be not only possible but also profitable. We remind you about the **green tariff**. Contact us in a convenient way for more detailed information.

We work with both wholesale and retail buyers. We offer inexpensive solar panels. All equipment is thoroughly inspected before shipment. If we work "turnkey", we determine the control steps to obtain information about the state of affairs. But each Client can receive operational information at any stage and soon live or work **outside the central network**.

Hybrid inverter for mobile power generator

First of all, remember that the **hybrid inverter** is the most common among others, despite its relatively high cost. It is called hybrid because it is able to work simultaneously with alternative sources and the electricity grid. The efficiency of inverters exceeds 90%, which is considered a good indicator. You need to choose them correctly for **mobile power plants**.

The device is also called multifunctional. It has high performance. Corrects network amplitude differences. Helps to save home appliances. Is safe enough. For the right choice you should contact the representatives of our company. We not only implement complex projects, but also offer to buy all parts of the **distributed power system** separately. We create **alternative energy sources**.

Question: Is it possible to look at the product before buying?

Answer: the goods are posted on our website, if you have additional questions, contact our representative.

Alternative energy offers great opportunities not only within the country but also around the world. It is extremely necessary to do everything necessary in the complex:

- at the technical level;
- at the legislative level;
- at the level of information dissemination, etc.

If **mobile power plants** allow to solve the problem of energy supply only for a certain time, then full-fledged autonomous solar systems can significantly reduce costs and even make money. This is the future and there is nowhere to go from it.

Mobile power plant: we work outside the central network

It used to be difficult to imagine a mass transition of citizens to "green" ways of obtaining energy, now more and more business entities and ordinary residents are **outside the central network**. This indicates significant changes in this direction. Even **mobile solar wind farms** are no longer a rarity. Many people want to **live independently of the central network**. But so far this problem is being solved slowly, especially in large cities. For example, today we cannot all start living independently of the central network. This is impossible neither from a technical nor an economic point of view. The **central network** will exist for a long time. In the near future, they will work in parallel. It is unlikely that in 10-50 years it will be possible to exist **outside the central network**. But this should not cause negative emotions. We need to work on this issue every day. We need to create conditions for everyone. Entrepreneurs calculate expected profits and risks. If the conditions are right, we will be able to be out of the **central network** sooner.

The **central network** is a complex state and interstate node. It is not only a source of energy for ordinary citizens, but also for factories, plants, enterprises of strategic importance and even a subject for political manipulation. The **autonomous solar system** allows to take control of separate territories by the inhabitants, which, by the way, will be another achievement in the issue of decentralization. Even a separate apartment building can be **outside the central network**. But this issue is not yet on the agenda en masse.

Alternative energy allows you to **live independently of the central network**. The promotion of the latest technologies accelerates the process of transition to ecological energy and the use of **green tariffs**. We have no choice but to join all the environmental programs of the world, to create **mobile power plants** and other sources. Separately, **outside the central network** to create their own environmental projects. Ukraine can create programs, set deadlines, appoint those responsible and move in that direction to stay **out of the core network** as soon as possible.

Alternative energy needs to be learned from school. To instill ecological culture in new generations, to impart knowledge, to explain that it is necessary to **live outside the central network**. Then we will raise a new ecological generation that will allow us to **live independently of the central network**. But start at least with a **mobile power generator**.

Question: Will Ukraine become an energy-independent state in 50 years?

Answer: it depends on the presence of technological breakthroughs, the pace that exists today does not allow us to talk about such prospects.