

## **Ours To Protect: 25<sup>th</sup> April 2024**

This week on Ours to Protect, series producer Ethna Quirke talked all things solar energy with Ronan Ronan Power, Ceo of Pinergy Solar, but what is solar energy?

Solar energy is any type of energy generated by the sun. Solar energy is created by nuclear fusion that takes place in the sun.

**Radiation from the sun is capable of producing heat, causing chemical reactions, or generating electricity.**

The total amount of solar energy received on Earth is vastly more than the world's current and anticipated energy requirements.

Solar technologies can harness this energy for a variety of uses, including generating electricity, providing light or a comfortable interior environment, and heating water for domestic, commercial, or industrial use.

**Solar Technologies** : There are three main ways to harness solar energy: photovoltaics, solar heating and cooling and concentrating solar power.

Photovoltaics generate electricity directly from sunlight via an electronic process and can be used to power anything from small electronics such as calculators and road signs up to homes and large commercial businesses. Solar heating & cooling (SHC) and concentrating solar power (CSP) applications both use the heat generated by the sun to provide space or water heating in the case of SHC systems, or to run traditional electricity-generating turbines in the case of CSP power plants.

### **What are the advantages of using solar power?**

**Solar is a renewable energy source which doesn't deplete on usage** - This means that solar energy can be harnessed in all areas of the world, unlike some other sources like fossil fuels.

**Solar energy will substantially reduce your electricity bills** - Meeting your energy needs with your own installed solar energy system will cut your energy bills. The amount saved by the system depends on its size and the energy demands of your home; the current recommendation from the SEAI is that a solar system should be sized to cover a maximum of 70% of annual electricity usage.

**You can receive payments for your surplus energy** - When your system is connected to the national grid and you generate more electricity than you require, the extra energy is sent back to the grid.

**Solar energy has low maintenance costs** - Solar energy systems have no moving parts like wind turbines, which means that wear and tear are eliminated. The inverter and the batteries are the only components that may require to be changed in about 5-10 years. The lower maintenance cost of solar panels means lower system costs, and more savings for you in the long run.

**Resources:**

[www.seai.org](http://www.seai.org)

[www.solarelectric.ie](http://www.solarelectric.ie)

[www.ourstoprotect.ie](http://www.ourstoprotect.ie)