

**For investors Ecologically sustainable residential center solar panels nursery school and schools.**

**Sustainable investment - Investing in sustainable investments offers investors the opportunity to make a positive contribution to the well-being of people and the environment.**

**Eco-sustainable residential center solar panels kindergarten and schools.**

**The project consists of a residential centre, offices and hotel and schools with a supermarket, small residential shopping centre, with medical clinics, hairdressers, dentists etc**

**All participants can be investors or buyers, even entrepreneurs, already booking the future mortgage or loan in advance, so that once the target has been reached, the loan can be disbursed to the participants and we can start building.**

**All operators will also be residents in this residential center. so that it also works 24 hours a day.**



**ELS Group Construction Metal constructions | Metal constructions - Metal Buildings | Metal Prefabricated - Prefab Homes | Prefab Houses Bioclimatic Residences | Prefabricated houses | Prefab Houses - ELS Group Prefabricated | Ground floors prefabricated, Double storeys · Mobile room systems | Lightweight steel construction and prefabricated warehouses | Light steel house | Prefabricated warehouses | Lightweight steel construction | Light steel school | Light Steel Clinic/hospital. | Renovations of Houses - Hotels - Shops and business premises - ELS Group constructions.**

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### Why Prefab Steel Homes are the Future of Housing

ELS Group prefab steel homes are produced with modern technology to provide reliable, fast built and value for money steel house solutions. There are no limitations when you consider your prefab steel home plan and design. ELS Group's team of professional engineers will take your requirements or hand-crafted plan and present it to you as a light steel houses solution. Prefab steel homes are customized modular buildings. The most important difference from other modular structures is that it has a steel frame. Light steel frame construction technology is becoming the most popular around the world, thanks to the many advantages it offers such as strength, safety, error-free construction, environmental friendliness, flexibility and most importantly affordable price. ELS Group's innovative prefab steel homes designs reduce costs. Prefab steel houses are a great option for those looking to build low cost & easily build a metal homes that not only goes up faster, deliver to whole world.



### Modern Prefab Steel Homes - Worldwide Steel Buildings

Prefab steel homes has multiple advantages. Building with our steel frame house systems you get superior strength, better energy efficiency, less maintenance, a fireproof material and the use of a green renewable product in your home's main frame support system. This alone makes it the material of choice for your family to deter the cost of maintenance and have additional protection in the event of threatening weather or fire. Metal structure houses are never damaged by termites or mold. Therefore, there is no need to use hazardous chemicals to prevent damage, eliminating excessive maintenance costs. Prefabricated steel houses also offer high energy efficiency thanks to their advanced design.

## Low Cost Family Prefabricated Steel Houses

**Steel Frame Homes: The Construction Model of the Future:** ELS Group is one of the world's leading steel framed house manufacturers. ELS Group Prefab Steel Home Technologies has decades of proven success in providing high quality, long-lasting and sustainable homes to more than 132 countries all over the world. Structural elements of Prefab steel buildings are produced under strict control in our modern factory and carefully taken to the place of assembly. Our light steel frame structures are light-weighted with a load-bearing building system capable of providing high accommodation while minimizing loads on the foundation. Light steel frame system can be used not only in houses but also in many different structures. The Prefab steel home construction process is fast, efficient and weather dependent. Unlike traditional construction, up to 80% of the work in a steel framing system is done in a factory that does not have drying or water issues to affect the structure. This means less time on site, less cleaning work, lower labor costs. All these features reduce the cost of prefab steel homes.





**1. Modular homes:** Modular buildings come in repeated sections—modules—that builders transport to the home site for final assembly. You can place modules in numerous configurations, allowing for a variety of floor plans and custom home options. Once completed, modular housing is classified as official real estate, meaning that prefab home manufacturers must abide by all regional, state, and local building codes instead of federal HUD code. A subcategory of the modular construction method is panelized construction. Builders construct panelized homes from wall panels that they join together in unique configurations at the building site. Panelized homes generally require more interior work and thus have the longest on-site build times of all prefab home types.

**2. Manufactured homes:** These prefab homes are completely constructed off-site on a non-removable steel chassis. The chassis is then used to transport the home. Once a manufactured home arrives at the final construction site and is set into its permanent foundation, the wheels, axles, and hitch are removed from the chassis. Manufactured homes must be built according to federal HUD building code, and the overall quality is typically lower than that of modular homes.

**3. Mobile homes:** The term “mobile home” was actually the original name for a manufactured home until the Housing Act of 1980 decreed that the word “manufactured” be used instead of “mobile.” Today it’s more common to use “mobile home” to describe a trailer home built on wheels and pulled by vehicle. Modern prefab mobile homes are considered personal property instead of real estate and must be built to DMV code.

#### **4 Advantages of Building a Prefab Home**

On the fence about purchasing a prefabricated new home for the first time? You’ll want to weigh the pros and cons before taking out a construction loan. There are four primary benefits to building a prefab home.

**1. Eco-friendly:** The assembly-line building process eliminates waste material, and energy-efficient features like solar panels are less costly to the home buyer when the home manufacturer buys them in bulk.

**2. Short construction time:** The majority of the prefab home construction process is completed in the factory in one to two weeks, with only minor finishing work required once the house is assembled at the building site. In addition, the indoor factory setting eliminates the weather delays that are common when building other types of homes.

**3. Cost-effective:** Prefab houses cost considerably less per square foot than a traditional home, averaging around 15 percent cheaper in total.

**4. High-quality components:** Due to prefab construction taking place in a controlled environment without multiple subcontractors, quality control is a much easier task.

## Modular Vs. Prefab Construction: 5 Key Differences

### Modular Home

All modular buildings are prefabricated buildings. Yet not all prefab structures are modular structures. The distinction between modular versus prefab construction can often get confusing. Do you know the difference?

If not, don't worry. It's not uncommon to confuse these terms and their mode of construction. So, let's discuss the differences.

There are three primary categories of prefabricated structures. Modular, panel-built, and manufactured. Furthermore, there are three fundamental principles of modular construction:

Design team engagement

Factory precision

Enhanced collaboration

These principles carry over to the other forms of prefab construction. Since developers do not build these structures on-site, design teams, manufacturers, and contractors have an easier time ensuring the success of these projects.

Before discussing the key differences between modular and other prefab buildings, let's look at their various types of construction.

### Key Takeaways:

Modular and prefab buildings are everywhere. Some are more noticeable than others. They range from office buildings, apartment complexes, commercial buildings, and portable structures.

Manufacturers construct each modular in the factory and transport that section to the construction site. Panels of some prefab buildings get transported and assembled on-site in segments.

Some prefab buildings, like manufactured homes, are not subjected to building codes the way modular homes are. HUD standards still apply to each of these types of construction.

Stability, durability, value, and style are some of the most significant differences in modular versus prefab construction. Modular construction can have an appearance similar to a shipping container. Other prefabs do not always have that look.

### Types of Prefab and Modular Construction

There are almost an endless number of buildings that contractors develop into modular and prefabricated structures. Real estate experts consider modular units to be better than standard prefabs.

The reason for this is that prefab buildings are generally temporary structures assembled from panels and are portable. Schools use these prefabs as temporary classrooms, or corporations use them for additional office spaces.

### Infograph of the construction of a prefab building versus a modular structure

Prefabs have steel-framed bodies, and contractors assemble them into easy-to-move buildings. In contrast, modular construction entails constructing the structure for permanent placement onto a foundation. Below are the most common modular and prefab buildings:

Office buildings

Homes and housing

Retail and commercial buildings

Storage buildings

School buildings

Apartment buildings, townhomes, hotels, and villas

Portable workforce housing units

Construction trailer rentals

Portable administrative offices

Portable medical labs

### 5 Key Differences Between Modular and Prefab Construction

Traditional stick-built construction accounts for 39% of carbon emissions, and roughly 40% of these materials get dumped in landfills. On the other hand, modular and prefab structures are more eco-friendly and use less energy to construct and maintain.

Now, let's review some of the differences between these two structures so you can determine which building suits your project best.

## 1 Type of Pre-Built Pieces

The types of pre-built panels and segments are the primary difference between these buildings. Manufacturers construct each modular in the factory. These modules then get transported to the construction site.

Contractors assemble prefab panels or segments on-site. Often, contractors transport these panels in smaller segments and assemble the pieces on-site. While the manufacturer builds these sections in a factory, they do not begin to take shape until the contractor constructs them on-site.

## 2 Building Codes

Manufactured homes and other prefabs do not demand the building code requirements of modular construction. They will, however, still need to meet HUD standards. Modular buildings must pass the exact building codes of stick-built structures.

## 3 Stability and Durability

Many prefab buildings lack the stability and longevity that modular structures offer. They tend to develop more problems and do not remain as energy efficient.

While they are better for the environment during development and assembly, it is not as eco-friendly to live or work in these prefab buildings. Modular construction is the sturdiest option.

Modular buildings also last longer and can withstand more abuse from the elements. For example, a modular structure can withstand winds up to 180 mph. That is more than prefab homes and even some stick-built construction projects.

The reason for this is the consistency offered by factory construction. Fewer variables impact the development of these buildings, like materials that sit outside and deteriorate during on-site construction.

## 4 Overall Value

The realty market does not consider manufactured homes and other prefab buildings as real estate. These structures fall into the category of personal property, the same as your vehicle. They depreciate more rapidly. That is not the same for modular buildings.



## Residential Solar Power Service

### Get Latest Price

Ecopower Energy

#### Service Description

With vast experience serving the residential segment, our industry leading team design, engineer and integrate every system to be reliable and perform to the highest efficiency possible. As a home owner, electricity costs can make up a large portion of your monthly expenses. We design your solar system to generate clean energy for the entire 25+ year's life cycle.

Understand Your Savings One of the clear benefits of solar systems is the ability to hedge utility prices. By investing in a solar system you can fix your electricity rate and protect against unpredictable increases in electricity costs.

We Design For You Ecopower Energy is a one stop solar service provider that takes care of every step during your switch to clean energy. We are technology neutral and we keep to the industry best practices so we can ensure that the best material are selected to suit your condition and obtain your best financial and energy return.

Feeding into the grid If the state solar policy permits, power generated from your rooftop can be fed into the grid and payment received based on a Net Feed-in-Tariff metering

#### Features Solar Modules

- IEC certified modules with 25 year warranty
- Reliability under extreme weather conditions, certified to withstand snow loads of up to 5400 Pa
- Greater energy generated due to positive tolerance

#### Inverter

- IP-65, environmental protection rating, can withstand extreme weather conditions
- High yield output with maximum efficiency of over 97%

Wide input voltage range

Compact Desiasy installation Call **Now**

In-built anti-islanding feature

### Module Mounting Structure

- GI coated corrosion free structures designed to withstand 150 kmph wind speed

### Components

- AC / DC Distribution boxes
- Cable and other accessories
- Earthing Kits

### Assumption

- The solar system offered is a fixed plate system.
  - The inverter will be structure mounted indoor unit.
  - The power generation from the solar system is considered under true south facing with a tilt angle of about 25 Deg and no major shading effects.
  - The system is considered to feed power at 1Phase 230VAC or 3Phase 415V / 50 Hz utility.
  - Approximate Area required 80 Sq.feet for PV Structure per kW InstallationBenefits
    - Hedge against increasing grid prices which have increased by 40% in past 5 years
    - Savings in electricity bill for 25 long years
    - Expandable – Multiple grid tie inverters may be networked together for increased net metering capacity or future system growth
    - Maintenance free system
    - Accelerated depreciation benefit - Your rooftop investment is eligible for accelerated depreciation of 80% in first year of commissioning ie 30% times 80% of project cost is tax-savings in first year 25 years
    - warranty for the modules and 5 years on inverter and balance of system
    -
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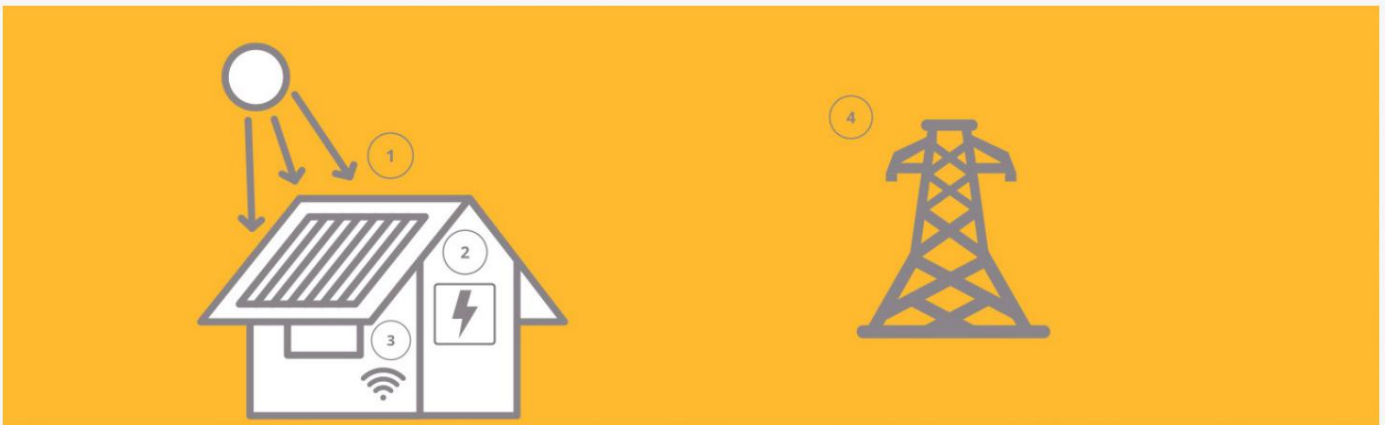
## SOLAR PANEL INSTALLATION

Home solar is the single best way to mitigate your family's carbon impact, hedge against blackouts, and achieve energy independence for your household. Our group will create a custom sun powered proposition custom-made to your home with an enhanced sun oriented exhibit affordable enough for you.

## HOW HOME SOLAR PANELS WORK

We're all about giving you all the info you need to help you decide if you'd like to go solar. That's why, free of charge, we'll draw up and send you a personalized preliminary plan based on your house. We do it all remotely and provide you with an accurate estimate of both the energy production you can accomplish and the cost of installation.

### THE 4 STEP REVOLUTION



**1**

Solar panels convert visible light into DC electricity.

**2**

Inverters convert DC electricity into AC electricity to get used by your house's appliances.

**3**

A monitoring system keeps track of how much energy your panels are producing.

**4**

A utility meter will keep track of how much electricity you use from the grid & send back.



## HOME BENEFIT

Did you know home solar can reduce your family's energy costs by 40-60%?

If you are not planning to move anytime near, solar is an obvious addition to your rooftop! Plenty of families see a return on their initial investment in solar in 8-10 years.

Not only that, but a solar array can provide a massive boost to your home's value! [Berkeley Lab](#) found a solar system increases the value of a home by \$3.00/watt. [The Appraisal Institute](#) found that solar homes increase \$20 in value for every \$1.00 in annual energy savings.