



## A Study on Renewable Energy and Wind Power

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**Abstract.** Renewable energy technologies are Useful for natural events By converting energy into forms that Produce marketable energy. However, they are commonly contagious and completely inaccessible, some are intermittent, and all have distinct territory variations. Features Renewable energy Development of resources and As difficult as their nature in use, But solvable, Technical, organizational, and Economic inherent challenges. The energy we receive is the continuous exposure of the Our planet and By the dynamics of its atmosphere The sun changes in many ways: Below the surface, High temperature causes its original function; For ancient photosynthesis The presence of hydrocarbons in the soil; Wind and waves for current temperature differences. Biomass fuels include low-energy cities and storage and transportation costs are prohibited. Producing electricity using biomass is technically well established, but cost-effective electricity occasionally offsets the full cost of biofuels. There are several efficient methods, so we politely propose the use of bioenergy we use patents as a measure of the technical range for each of these four technologies: air, sunlight, geothermal, and electricity from life and waste. Wind power is a fast-growing source of renewable energy and most instant phase connection causes problems; the Time variation of wind power is well documented. It is assumed that 'ERG' runs on air. The output of the Sperm Turbine Debates One the Wind Speed, With Wares over White Range measurements. In addition to power generation, water pumping dominates the provided in the literature on Applications of solar energy. Solar power efficiency Calculated and completed using a GIS-based solar radiation instrument by evaluating local properties.

**Keywords:** Renewable Energy, Waves, Biomass, Wind Power, Solar Energy.

### 1. Introduction

Renewable energy, throughout the paper Related to the environment and sustainable development Many issues are present and Are explored in the future. The coming energy shortage needs to be addressed with greater Utilization of Renewable energy sources and Technologies. The reason for this sometimes leads to fancy and impossible claims. Air, water, and The mechanical energy of the waves Can be converted into electricity transmitted farther (and farther) from the source. Centuries ago our grains were not forced to be brought to the windmills. The Earth's different heat generates air, which generates some waves of their energy as they cross open water bodies [9] we use patents to measure the technical boundaries of each of the Pouring Techniques: Sperm, Sunlight, Astrology & electricity from biology, and Waste. These resources are For all economic sectors Electricity, Fuel and Transport, And buildings for industrial processes Used to generate heat. World fuel prices will be relatively high In some parts of the world When fuel prices rise This is an especially true rise in the future. For Solar and wind systems, not just fuel costs are fixed, but the life of the system is zero. These technologies have been it has technically well-proven in many organizations established Over the past few decades All over the world. Most installed solar PV technologies Silicon based on systems. Solar PV has two benefits Integrates.

### 2. Renewable Energy

Renewable energy resources are Very efficient and ineffective solutions Appear together. Renewable energy constant by itself there is a close connection between developments is illustrated with practical phenomena. Furthermore, possible Solutions to current environmental problems are Renewable materials and energy detected by technologies. Renewable Relationships, Renewable Energy, Related to the environment and sustainable development many issues are present and are explored in the future. One solution to the Upcoming energy shortages is the greater Utilization of renewable energy sources and technologies. This reason supports the curiosity that sometimes leads to fancy and impossible claims. In this regard, a close relationship is developing renewable energy sources between sustainable growths. The main purpose of this article Acid rain and stratospheric ozone depletion and like the future forms of greenhouse Is to explore environmental issues. Finding some solutions to Future energy use and Resulting environmental impacts and current environmental problems. At this point, Renewable energy technologies Based energy conversion systems seemed more attractive because planned higher oil prices and cost-performance Ratings and renewable energy systems were easily implemented. Also, in recent times, renewable energy sources and Systems have had a positive impact on the following. World technology, environment, economy, and Political issues. Renewable energy technologies Natural phenomena as effective energy form the energy that can be marketed by conversion. However, they are generally contagious and completely inaccessible, some persistent, and everyone has different regional differences. Such features of their nature are difficult, but solvable, technological, organizational, and economic Inherent challenges Of renewable energy In development and application resources. This will

lead to job creation with innovative products and government support. Advances in other technologies, especially high technology, have sparked Some Innovative Ideas in Renewable Energy System Designs. Operational cost uncertainties related to Future fuel costs. Renewable energy technologies the overall benefits are mostly not well understood not as cheap as traditional technologies. Solar Electricity and other renewable energy Technologies will be short-lived Small scale for electrical systems can provide skill combinations. Renewable energy systems the impact of global usage is certain to reduce pollution levels. The last two decades have been huge advances in solar energy technologies, especially photovoltaic's. Advanced Renewable The development of energy technologies, Instead of conventional energy is a low-cost and environmentally friendly alternative production. Such measures will Renewable energy technologies about the benefits of using Encourage potential users to think. Renewable energy in remote communities accelerating the application of technologies in a country is conducive to the development of a key technology transfer area. Although not all renewable energy resources are naturally clean, switching to renewable in the environment of sustainable development offers a variety of options that can provide a Much Cleaner System One Conventional on its Possible Play is Dieting Controls energy [1]. Renewable energy (RE) should provide most of the Energy in the future. What is RE in this article Energy levels can eventually deliver and Answers questions that can be provided during this period. Given the problems faced by both fossil and nuclear fuels, RE should take into account most energy production within a few decades. However, widespread uncertainty surrounds national and global estimates of technological feasibility for all renewable energy sources [3]. Two the key Renewable energy for sustainable development the challenges of the strategies can be identified. In the energy system, especially in electricity integrating a large share of unrestricted resources is a challenge. Denmark, meanwhile, has great Possibility for other forms of renewable energy, especially wind power. The purpose of the analysis is to evaluate the possibilities of an Identify the 100% Renewable Energy System and key technological changes and appropriate implementation strategies for Denmark. However, we of renewable energy concept is complex and in favor of many Argues that should be abandoned. We demonstrate key issues of renewable energy conceptual consistency, inconsistencies, policy implications, bait and change strategies, and misleading in general. Instead of believing in reducing the share of Buried energy monuments, the explanation behind the renewable energy solution, says we need to improve our communities through the use of renewable natural energy flows. Rather, its purpose is to measure the whole concept of renewable energy in the field of energy policy today. While we rely on architectural theory, we also refer to renewable energy as a "concept" together. This in part explains why this concept is so complex in today's context. Renewable energy is our common need Energy policy and climate change mitigation have become important concepts. The popularity of this concept will be a major effort in creating the current map usage in detail International Political Forum on how the EU (EU) energy policy was adopted as a renewable energy concept.

Promoting renewable energy In the EU energy policy described above Is one of the basics; Renewable energy is a widely accepted concept in the field of energy policy. It was developed as an alternative to fossil and nuclear resources, then applied to the concept of an imaginary harmonious community has now become a central ideological construction module in Energy policy theory and practice. Renewable energy sustainability issues are not limited to bioenergy. Hydroelectricity is not associated with severe adverse environmental impacts, especially with similar impacts related to fish numbers and alteration of freshwater hydrology. An interesting side note is that the agricultural land report defines nuclear fission potential as renewable energy, also known as "fast neutron spectrum" Or breeding furnaces. It is an umbrella system that includes different types of energy sources. The face of policies is, in theory, to act against their product. At least with current technologies, all kinds of renewable energy production depend on non-renewable machines. As Variable energy production is balanced by chemical batteries, which, as we have pointed out, exacerbates this problem; there are many issues with the concept of renewable energy. Often though related to consistency, both concepts may be completely contradictory. The role of renewable energy in successful energy is a bad indicator of policy [5]. Sunlight and heat by the environment Are transformed and absorbed in many ways. Some of these changes are vital Like air renewable energy Results in renewable energy flows system development Enables solving current most important tasks Power supply reliability And improving fossil fuel storage; Ensuring sustainable growth; Environmental protection and rural areas Implementation of renewable energy projects Of countries required to comply with related international agreements Execution of duties will create jobs. Reduce relocation to urban areas [7]. From this perspective, we consider the way the community is connected to renewable energy projects in the United Kingdom. We ask what those involved uniquely found to be that Social Renewable Energy schemes are different from other renewable energy installations. As a result, renewable energy projects if the benefits are not shared, internally split and our research suggest that will become controversial. This is very important, beyond their impact on reducing greenhouse gas emissions, 'In the hearts and minds of local people Working projects are part of the rationale for public investment. Positive beliefs about renewable energy and Consequences of promoting actions [8 Ocean offers Developing Energy resources and renewable energy technology; Investment in marine energy will increase. Ocean heat transfer, Wave energy, wave energy, and Coastal wind power also led to promising technologies. Global climate change on fossil fuels and other environmental impacts of global trust have increased interest in renewable energy. Renewable energy research from the ocean and Development can be a comprehensive need, for comprehensive and responsible energy. This article aims to develop development guidelines responsible for protecting the marine environment with renewable energy from the ocean Presents and compares key potential sources. Renewable energy sources must be created while restricting the production of greenhouse gases to meet the expected demand despite efforts to improve efficiency. Ho Weaver's accurate accounting for the external costs of energy production sheds a very positive light on renewable energy, Advances in technology and scale economies will significantly reduce the cost of such technologies over time. Renewable energy research often focuses on the development of the sun and wind, biological and geothermal sources. When all of these resources are highly promising, a better and stronger energy policy is to utilize the full range of renewable energy sources. The car's

complete selection of Affordable sites and the changes in the environment caused by power plants are important for the effective development of these technologies without harming the sea [11]. Renewable energy sources (RES) are often alternatives Referred to as energy sources. RES, which uses domestic resources, Air pollutants, and Zero or two of the greenhouse gases with almost zero emissions Capable of providing energy services. Renewable energy is pure or perennial energy such as Hydrogen energy and Nuclear power. RES occurs naturally in the environment, therefore, to not be so exhausted. Hydroelectricity is cheap, and unlike many renewable energy sources, it does not generate air pollution primarily renewable energy technologies Simple machine applications and did not achieve high energy efficiency. The industrialization has shifted from renewable resources to the Utilization of primary energy, Great sources of energy Such as coal and oil. [12] Overall benefits of using renewable energy in terms of environment Resource protection and freedom of imports now seem undeniable, and the overall economic cost of Renewable energy support continues to be an issue in these sectors. We share an analysis of the key implications of Renewable energy support for employment with previous courses: Higher investment levels and larger skills directly in employment in the respective professions have a positive impact. Although this theoretical definition should be explicitly Eased due to Rotates Differences Bad wine New technologies and systems Us Obi Data Controls, Renewable Energy Sources, and POSL Pool Technologies. Because climate change is A global problem exists in many countries reduce climate emissions by Adding renewable energy to their energy combinations, So take advantage of the export benefits of these technologies There are good opportunities. Using renewable energy is Attractive for the production of systems the place is still considered Germany? Domestic investments and Exports in the respective industries at work at the same time have a positive impact. Renewable Energy Support The overall economic impact depends on the additional costs of all consumers. [18].

### 3. Waves

The energy we receive from the constant reception of the sun changes in of our planet and its atmosphere in different ways by dynamics. High temperature below the surface is Responsible for its original operation; the presence of hydrocarbons in the soil for ancient photosynthesis; Wind and waves for current temperature differences. Through the dynamics of our planet and its atmosphere, the sun changes in different ways. The high temperature below the surface is responsible for its original function; the presence of hydrocarbons in the soil for ancient photosynthesis; Wind and waves transmitted farther (and farther) from the source. Centuries ago our grains were not forced to be brought to the windmills. The Earth's different heat generates air, which generates some waves of their energy as they cross open water bodies. Waves without significant losses Travel long distances, High temperatures below the surface thus thousands of kilometers Acts as an efficient energy transport mechanism, after which an ocean level is referred to as the spectrum of regular waves, and the wave height is summed based on the Spectral peak, dominant wavelength, and average wavelength. These wave spectrum parameters Measure wave energy resource units and Are used to rate Energy flow per wave. It is necessary to adjust the bodies that oscillate for a When in waves. Therefore, the site needs a good understanding of tidal climate. Although windmill is a Spectral peak, dominant wavelength and average wave length .can be extracted from an ocean wave that is not on the surface of the wave [25].

### 4. Biomass

Gas is available in India The technologies are based on downstream ventilation and are pioneers of wood biotechnology. Increasing bio-utilized energy production for power generation, increasing performance, And to reduce environmental degradation and waste use Is an attractive option. This process, rather than a classic power plant, Gas power plant provides high efficiency of power generation bio and steam cycle. Improved cooker stoves improve home economics, improve fuel economy, improve indoor air conditioning, and clean kitchens. There are three types of benefits to burning stoves: (1) Reducing fuel demand, economy, and time savings, and increasing The sustainability of the natural resource base; (2) Man's expression in the air is low pollution that is harmful to health; And (3) Propofilo thermo chemical conversion processes such as reduced emissions of greenhouse gases, paralysis, and biomass gasification, which are considered to increase global climate change, have significant potential for renewable hydrogen production. Biomass for bioenergy comes directly from the ground, i.e. residues formed during the processing of dedicated energy Crops or crops for food or other goods. Although biology can burn energy directly, it does work as a raw material for the conversion of various liquids or gases into fuels (biofuels). Biomass fodder can be converted into bioenergy through thermo-chemical and biochemical conversion processes. Biomass fuels include low-energy cities and storage and transportation costs are prohibited. Generating electricity using biomass is technically well established, but expensive for electricity occasionally covers the full cost of biofuels. There are many efficient methods, so the use of biofuels politely proposes [9] we use patents to measure the technical boundaries there are four such technologies: wind, sunlight, and wind, which determine the appropriate IPC codes for renewable energy directly in solar areas. We use the patent as a measure of technology Air, solar photovoltaics, and the range of four such technologies. We will explore the investment in each of these technologies by Integration of patent data with country-based data in the field of electricity. They are looking at the discoveries in five technologies: wind, sunlight, geothermal energy, bioenergy, and ocean energy. Much of this innovation is in line with the policies adopted Following the Kyoto Protocol. Discoveries related to Biomass and marine energy are also growing, but not at one much lower level. These are accustomed to determining relevant IPC codes that are directly related to renewable energy in wind and solar areas. Photovoltaic, geothermal and biological, and waste. Biomass and waste energy diversify energy supplies and help eliminate solid waste.

Depending however does not reduce carbon emissions in the slightest compared to natural gas or coal. Interestingly, the percentage of clean alternatives to air and recognition is only significant from geothermal and electricity from bio and waste. They find innovations in five technologies: wind, sunlight, heat, bioelectricity, and marine energy. Discoveries related to bio and marine energy are also growing, but these have been used from a very low Basic Kyoto is only significant for air and biomass. Nevertheless, the impact of knowledge on air and biology is a significant setback. Also, for the overall model and the air, the dimensions are the same; our Knowledge sharing results are strong and are not affected by the characteristics of the country. As the level of effect of knowledge increases to biology, there may be unnoticed life effects of this technology [13].

Biomass is now and in the future, Very widely used As a Source of renewable energy. Possibly in some parts of the world sustainable large water resources are very limited. In the long run, countries with surplus biofuels can emerge as biofuel exporters. Changing end-user requirements can be created to complement. In the future, to provide low-cost and sustainable energy there will be biofuels source helping countries achieve their greenhouse gas reduction. Various technologies are currently in use to produce hydrogen economically from biology [33]. These are natural renewable resources and their Distribution is not affected by the consumption rate. Lighting, cooking, and heating in the home and service sector And the energy consumption for other devices have changed significantly in recent years. Renewable energy resources are Abundant, Sunlight, wind, life, small water energy, etc. Effectively meet energy needs doing is harmful to the environment. The study pointed out that renewable energy in China shows a promising opportunity [51]. These resources combined with energy demand can be enormous and there can be problems in integrating the bulk of the existing distribution systems are intermediate RE. Due to the significant rise in energy demand, rising prices and fossil fuels Reducing supply and related environmental concerns, the Greenhouse effect, especially biomass is increasingly being considered as a clean alternative to fossil fuels. From biology to biofuels Includes a wide range of fuels are obtained. The word is solid biofuels, Including liquid fuels and many biogases. Second-generation biofuels are lingo cellulosic biomass, or wood crops, produced from agriculture. Residue or wasted, the required fuel Difficulty in extraction [61]. It can supply only a fraction of the global energy needs. Biomass has been used for centuries, in many ways, for heating and cooking. This is visible in mechanical motion. Half of the world's population, for cooking and other home use wood fuel or other biological Depend on materials. Hydropower, bio, Case with the wind. Aquatic plants are still used in our villages; however, their number is declining. Sunlight Causes plants to grow, and in those plants Stored energy is Called befouls. Fuel wood, agricultural waste, and animal waste, for biomass energy from biological sources, Including charcoal and other fuels obtained. Fuels and other biofuels primarily are handled and burned by women. They are mostly like recipes they are responsible for continuous work and are often involved in any household business. In the form of wood waste and animal waste Biofuels for heating in many urban areas, it is also the main fuel for cooking. [78].

## 5. Wind Power

"Renewable energy" Like sunlight, wind and running water Based on self-renewable energy sources, a Wide range of energy Derived from resources, global warming and Energy crops, agriculture and biology. These resources provide electricity to all sectors of the economy, Transport and building and fuel for industrial processes Used to generate heat. Fuel prices are relatively high Fuel prices will be higher this is especially true in parts of the world that will rise in the future. The life of the system is zero. Global climate change, Carbon dioxide is high in the atmosphere other gases are a recent Environmental concern; Systems that use solar, wind, and geothermal sources No carbon dioxide contributes to the atmosphere. In wind power systems the combination of these resources can be enormous and there can be problems in integrating the bulk of the existing distribution systems are intermediate RE. Significant increase in energy demand, Due to rising fossil fuel prices and supply and environmental concerns, the Greenhouse effect in particular is increasingly considered a clean alternative to biomass fossil fuels. The word is solid biofuels, Including liquid fuels and many biogases. Second-generation biofuels are lignocellulose biomass, or wood crops, produced from agriculture. Finally, by opting for Renewable energy systems, rather than centralized fossil-fuel systems, affecting the industrial worlds of developing countries Excluding environmental issues and costs, As these technologies begin to expand rapidly Gain the economic opportunity. [2]. this article focuses on the connection of wind generators whose ERG volume is limited by the voltage rise. Wind power is a fast-growing source of renewable energy and causes Most immediate grid connection issues; Time variation in With wind power Energy saving utility, From this point on, it is considered to be an airborne 'ERG'. Wind power is well documented. Spectra For these reasons, the output of the wind turbine depends on the wind speed, it varies many times over in measurements. Relevant the speed of the local wind must be calculated from the data to predict accurately the nature of the windmill Variations in a given space are required to design the appropriate Energy Store. Loads in the power supply system vary depending Spot price of electricity, Time of day, day of the week, Season, and other unpredictable factors. The latter, basically random components are small compared to Wind power fluctuations and are ignored in this study. Power generation was measured by modeling Wind turbine capacity at Different levels. Velocity distribution of all air Modular biomass capacitors weakening the benefits of electricity to add to the population. Finally, by opting for costs that could affect the industrial world. Seize economic opportunity [2].

Energy is exported when Wind power drops below the maximum power. The exported electricity is determined by the average net power of that period or maximum voltage range, which is set to the smallest. The energy rating of the energy store is attached to it. Energy management and energy reduction, which include energy storage of more than 24 hours, allow wind power to be absorbed by a weak phase up to three times compared to a conventional phase connection [17]. This study found that not enough solar, wind, and biomass energy was used currently, But these energies are Iraq's renewable energy



and Can play an important role in the future. Technology was used. Several Twenty-three stations were selected for the analysis of wind power studies in Iraq. The daily sample for wind speed has the maximum values during daylight hours and early morning hours. This is lucky because the wind speed is higher in summer than in winter it requires electricity in summer increases due to cooling and ventilation loads. In addition, many parts of Iraq have significant wind power potential [42]. Despite such positive ratings at Abbreviated, placed renewable energy applications. Impact on wind energy, noise generation, shadow casting, landscape, and other aspects about this source text for more translation information Source Text Send feedback Page panels are often negatively rated and may occur local opposition. Research on the multifaceted rationale for shaping the general attitude towards has identified a set of factors influencing wind energy. The Central to this study is the acceptance of wind energy, as well as technology because solar/light voltage is present in both communities. Social Wind power leads to the co-ownership of electricity the local acceptance of wind turbines installed nearby, rather than the Ownership of a wind farm by a business entity. The social co-ownership of wind power usually concerning wind power Leads to a positive attitude from the local people. The above concept of 'energy citizenship' Leads to the final hypothesis of this study on wind energy. The social right of Renewable Energy 'Energy Citizenship' has the power to create by promoting local people through Awareness of control and self-sufficiency, energy production and consumption patterns, and awareness of the environment. Both communities face an almost equal socio-economic situation, Very low budgets, and some opportunities for the local economy. However, all of the families interviewed are close to their respective windmills. The company hoped Community a common project would be the best partner as it Energy efforts of local administration and the potential opposition to the largest wind farm in Saxony planned to be used. Thus, the community does not engage in located windmills. Wind power capabilities are mainly concentrated in the state of Oaxaca and five different parts of the solar system power are located in the best place in Mexico, known as the Solar Belt. Universidad Nacional Autonómica D Mexico has led research publications on hydropower, wind, solar, and biofuels in the Institutional Investigations of Electrical during this period. RES includes life, hydropower, global warming, sunlight, wind, and the sea energy.[7].

## 6. Solar Energy

Hydroelectricity is generated from moving water in a hydraulic cycle driven by solar radiation. Solar power generation uses solar heating systems or Solar photovoltaic (PV) and with electricity through concentrated solar (CSP) systems Energy to supply hot water. These technologies have been around for the past few decades with many organizations installed around the world are technically well-proven. Provide pool heating for industrial applications [9]. Regional socio-economic impacts of solar energy use are rarely mentioned because previous studies in the literature on solar energy have focused on technical issues. However, there are many analyzes of regional solar energy efficiency. In addition to power generation, water pumping dominates the Applications of solar energy presented in the literature. Weather input data for calculating solar and wind energy, near Lamina Obtained from an automated meteorological center located northeast of the study area. GIS methods are widely used for modeling solar radiation. The solar radiation module converts geographic coordinates into a systematic integration. System and then determines the tilt Sun angle. An additional variable is the number of days in a given year. Significant contributions to household energy needs can be met on a small scale. Unique solar power systems or standalone heating systems considered in this study were not included in the study. The main RES in rural areas is to use solar energy to heat the house and wind power to be used to provide electricity to remote areas with limited access. This study promotes growth By strengthening the role of the RE sector in selected target municipalities' biogas, solar power, and solar energy generated locally [31]. There are various renewable energy technologies, but both solar and wind has attracted much attention. Clean energy technologies such as renewable energy and solar energy have the potential to play a significant role in Australia's energy supply. This indicates that Australia has the potential to meet a large percentage of its energy needs with solar energy. The Australian Government has a wide range of solar PV projects and initiatives. Green loans are trying to help the new Australian government and Australian people cope with climate change. The Green Credit Scheme helps Australian Homes be equipped with solar, water storage, and energy-efficient appliances. The main objective of Australia's Solar City project is to combine environmental and economic impacts. Cost-reflective price with wide use of solar energy technology, energy efficiency, and smart measuring devices. Each solar city has Solar PV Technologies that integrate energy efficiency measures into cost-reflective price tests for energy performance measures for homes and businesses, energy users, and community education. The Uniqueness of sun and wind energy must be the source [39]. The reliability of solar radiation data is essential for the economical use of solar energy. It is necessary to measure solar energy data from all parts of Iraq to assess the Advantages of using solar power in Iraq. These relationships were accurate in solar radiation estimates. Contact levels have been identified for three regions in Iraq. Solar radiation from the north Descends strongly towards the south and increases in winter and decreases in summer [42]. These programs are raising awareness Proper Use of solar home systems among consumers. Therefore, Solar Business Industry Nationwide to position itself the study explores whether a common strategy should be implemented. Authors the benefits of using solar energy and Outline the possibilities associated with solar energy Problems related to the organization and the sector in Bangladesh. The concept facility for renewable energy generation will somewhat improve the concept created by the country and the community as a whole, but Proper sales and services provided to consumers will contribute to the economy.

Through solar photovoltaic (PV) technology rural electrification is very promising And very popular. Solar housing systems are very versatile and very advanced adaptable to remote, inaccessible areas. So solar power system business was introduced. The use of renewable energy is similar to the absence of environmental pollution air; sunlight, biomass, geothermal, tidal, and hydropower have become increasingly urgent, especially in developing countries. Others applications of solar energy include radios, televisions, Charge cassette players, and cellular phones. Solar power Easy to install and low

maintenance cost and no monthly fees. Bangladesh Electricity Development Board Electrification emerged as too highly suitable technical Option to electrify these areas. Due to this Using solar panels can produce more electricity. For this reason, to produce electricity we often use solar panels. Solar radiation seasons vary in Bangladesh. Fruits and vegetables they have developed a cabinet dryer for drying. This is a flat plate-coated IFRD, It absorbs solar radiation, Turns it hot and the resulting heat is converted into circulating water. Solar PV-based Irrigation in Bangladesh is not a new concept. There is no sophisticated requirement for these components. An Alternative Micro-Grid System Separate small-scale grid is designed to supply electricity from the central power station to small rural areas. These power stations may be Solar PV or Solar PV-Diesel hybrid. At present, there is no known recharging station to charge them as they use more electricity Phase. So it is possible to create a Based on a solar PV Electric Vehicle Recharging Station. This process is a normal CNG filling station or works in conjunction with a petrol pump with solar panels on top of it. A solar cooker is a device that generates heat using sunlight to Cook food. Solar cooking is a Clean and safe cooking method. It is abundant in nature to cook food and Uses solar energy. There are three main types of solar cookers [13]. The possibilities of this type of business and determining the positive effects. Price of solar-powered devices and Find out who is using this system. About the overall solar energy business Develop a clear idea. Problems related to this type of business. About the solar energy system Thought and Plan of the Government of Bangladesh. Through questionnaires from respondents using solar energy Primary data were collected and directly related to business. In the country, usually at a distance, People in the area use solar panels for electricity. [86].

## 7. Conclusion

We ask what those involved uniquely found to be that Community Renewable Energy Programs are Different from other renewable energy installations. As for the consequences, Renewable energy projects can be taken internally our research suggests. the general population. This is so important that, In reducing greenhouse gas emissions Beyond their impact, It's in projects that work in the 'hearts and minds of local people Is part of the reason for public investment. Positive beliefs about renewable energy and Consequences of promoting action [8] Provide marine energy a resource, as more and more renewable energy technology develops, Investment in marine energy is likely to grow. Although the windmill is a clean energy source that can do little harm to the environment. Because windmills are built over a wide area, their appearance is considered aesthetic and large. Noise from windmills makes the neighborhood uncomfortable. They see Innovations in five technologies: wind, sunlight, geothermal energy, bio, and marine energy.

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