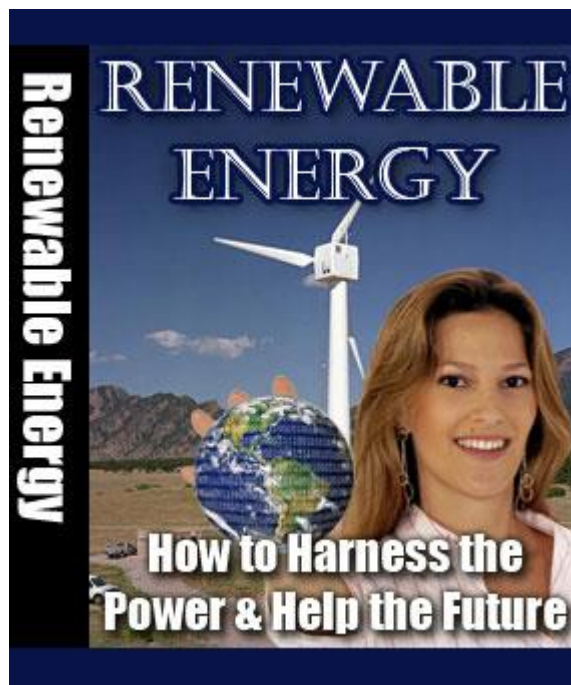


# Renewable Energy: How to Harness the Power and Help the Future



LEGAL NOTICE: The Publisher has strived to be as accurate and complete as possible in the creation of this report, notwithstanding the fact that he does not warrant or represent at any time that the contents within are accurate due to the rapidly changing nature of the Internet.

While all attempts have been made to verify information provided in this publication, the Publisher assumes no responsibility for errors, omissions, or contrary interpretation of the subject matter herein. Any perceived slights of specific persons, peoples, or organizations are unintentional.

In practical advice books, like anything else in life, there are no guarantees of income made. Readers are cautioned to rely on their own judgment about their individual circumstances to act accordingly.

This book is not intended for use as a source of legal, business, accounting or financial advice. All readers are advised to seek services of competent professionals in legal, business, accounting, and finance field.

## **Table of Contents**

### **Chapter 1**

**Introduction Page 4**

### **Chapter 2**

**What is Renewable Energy? Page 7**

### **Chapter 3**

**Types of Renewable Energy Page 9**

### **Chapter 4**

**Solar Power Page 11**

### **Chapter 5**

**Wind Power Page 15**

### **Chapter 6**

**Hydropower Page 19**

### **Chapter 7**

**Biofuel Page 22**

### **Chapter 8**

**The Future of Renewable Energy Page 25**

### **Chapter 9**

**Conclusion Page 28**

# Chapter 1

## Introduction

We have come along way in developing societies that have electricity and the power necessary to fuel vehicles and for industry to be successful. All of these efforts though rely upon the use of energy source that comes from fossil fuels.

They are found in the ground and have to be processed in order for us to have that fuel and that electricity. They are known as coal, natural gas, and fuel. We rely on them way too much for our own good and that is why change is so important.

The problem though is that our dependence on it continues to grow. As more people are upon the Earth than ever before we are using more every single day. People are living longer too due to advances in health care. We are certainly a society dependent upon our electronic gadgets as well.

While those are all good things for us to be happy about, the fact that we are depleting the fossil fuel available isn't. This type of energy source isn't one that we will be able to replace. When it is gone it is gone and that is the reality of the situation.

It won't all disappear during our lifetimes, but it is going to pose a problem for future generations. While efforts can be made to conserve fossil fuels, eliminating enough of the use in order to really make a difference isn't going to occur unless we take a close look at some alternative methods.

Society isn't going to go back to using horses and carriages for transportation. They also aren't going to go back to lighting their homes with candles at night. With the computer use around us in homes and for business it isn't even practical

to suggest we stop using the electricity that is necessary to allow them to operate.

We can often take for granted just turning the key and our car starts, turning on the thermostat to have heating or cooling in our home, and flipping a switch to give us the lighting we need in any room. Some people are also selfish as they don't care what is going to happen for future generations as long as they have what they need right now.

Luckily, the majority of the population doesn't think that way. They aren't out to use everything they can without looking back. The problem though is that they often don't realize what they are using could be a problem down the road. Even if they do, they may not realize that they have some other options they can try to implement.

Learning about the various types of renewable energy is a great way to get a person thinking about changes they can implement. There have been some significant efforts made in this area but there is still much more than needs to be taking place. Instead of being afraid of what is unknown to you, do your best to learn the basics of all the renewable energy sources possible.

The government of the United States has gotten involved in promoting renewable energy sources as well. They offer some great financial incentives for homes and businesses to you them. Even so, there is sometimes a high overhead to get everything in place. This can prevent many people from being a part of saving our natural resources even when they really would like to.

It is estimated that about 13% of our current energy is the result of renewable energy. With the money to cover the expenses, advanced technology, and a desire by society to continue using them we can see that percentage significantly

increase. There are plenty of benefits to renewable energy too such as not harming the environment with pollutants.

If you are asking yourself why we don't just turn to them now the answer isn't that simple. In a nutshell there is still a great deal of research that needs to be completed. There is also the high cost to contend with as well as various disadvantages with each of the types of renewable energy.

If you keep on reading though you will get to this information as well. Then it will make sense as far and the big picture of what we currently get from renewable energy, what the limitations are, and what we can expect into the future. This will help you to understand the benefits as well as the drawbacks of the situation more clearly.

## Chapter 2

### What is Renewable Energy?

Fossil fuels are used to make energy we use, but once they are gone we will never get more of them. Coal, oil, and natural gas all fall into this category. They are used all over the place in high amounts so you may not realize that they are in limited supply.

These forms of energy have been used mainly because they are affordable and they don't take up very much room to incorporate. They can be transported anywhere they are needed as well. With natural resources there have to be certain elements in place in order to take advantage of them.

The concept of renewable energy embraces the ability to use the resources we naturally have, but that we will never run out of. This way we can continue to have all the benefits we want without destroying the Earth.

We also won't be preventing future generations from having the chance to future grow and evolve beyond what we were able to see take place in our own lifetime. This process involves taking these types of natural resources and turning them into a product we can use for power.

That means a great deal of information and technology has to be collected and evaluated. Many of these methods though continue to see advances in the designs and processing which will result in them being even more valuable in the future than they are right now.

Most will agree that renewable energy sources are better for the environment. The burning of fossil fuels including gasoline and coal isn't good for the

environment. These natural resources will allow us to save resources and at the same time to live in a cleaner environment than we have now.

Many believe it isn't practical or safe to depend only upon these types of resources though. That is because the sun doesn't always shine so the energy can't be collected. There are many places where the sun is blocked for days due to the changes in the seasons.

You can't predict how much wind will be produced or how much power can be taken from the water. It will vary significantly but there is no reason why we can't rely upon these renewable energy sources as the primary providers. We can then depend on fossil fuels as back up so we never have to go without the energy we want to use.

Chances are you have heard about the various forms of renewable energy but not in detail. Keep on reading and you will get all the information you need including the pros and cons of each type. You will find each of them does offer some hope for the future though as far as reducing our dependency on those resources which we can't replenish.

## Chapter 3

### Types of Renewable Energy

When you think about the natural things around us a couple of things come to mind. First, you have the sun that continues to shine brightly in the sky day after day. It gives off a great deal of heat which can be converted into energy. The sun shines brightly some days and then is covered with clouds other days. So the amount of energy you can collect each day is going to vary.

Next, you have water which covers the majority of the surface of the Earth. There is also the additional moisture and rainfall that can be collected as time goes by. There is energy found in the water as it moves along and this can be converted into energy at hydropower plants.

Even if it is just barely there on certain days, you also have the wind. In some areas it is extremely windy all the time. In order for the equipment used to create wind power to be worth the cost it must be blowing most days at a speed of at least 15 miles per hour.

Most people view that as a nuisance but they don't realize the full potential of it. They aren't really aware that the wind that is all around you can be used to create renewable energy. It is also very clean for the environment so you don't have to worry about negative effects from it.

Biofuel is also a source of renewable energy and the one most people know the least about. This concept involves using types of materials that you can burn to create energy. This can be left over paper and wood, trash, and even manure from animals.

It is quite an interesting concept and one you will want to be sure you read about. You can be sure this is one area of renewable energy that will continue to grow by leaps and bounds in the next decade. Don't underestimate how valuable it can be as it also removes waste from our environment. This type of renewable energy is scientific in nature and one that has been around the least amount of time.