

OCEAN POWER WORD SEARCH

O A H X D Q G I F P I Q Y C R
W F W E Q O E O E A B G R N X
G K C S J F E T C C R O O M A
P R R T U R B I N E L M A P R
S E V G X N T D N E A Z E Y Z
Z N I A H E L E R J R N I T P
T E C H N O L O G Y I S X Z C
C W L I N H O E M P R C T G H
G A K A A N D F N X O I O V E
C B R N P N O M B P L F H S A
H L R B I A K O R I S O S M R
E E E W O V S U E D D I P T V
A L G A E N E K E E N G C O T
P C E V N T O E F L S E A W N
F Q T E A C L K O D I S U E E

Below are some words that describe the energy that comes from the ocean and some of its many benefits. See how many you can find in the puzzle!

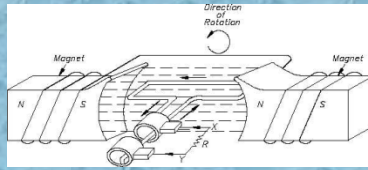
algae
carbon
cheap
clean
energy
farm
kinetic
ocean
renewable
sun
technology
tide
turbine
wave
wind

HOW IS ELECTRICITY MADE?

- Parts needed:

- 1) **Conductor:** loop of wire

- 2) **Magnetic field:** created by electromagnets



- Electricity is generated when the conductor moves within the magnetic field

- Either the conductor or the magnets can move

- Most commonly the conductor rotates through the magnetic field as in the diagram shown here

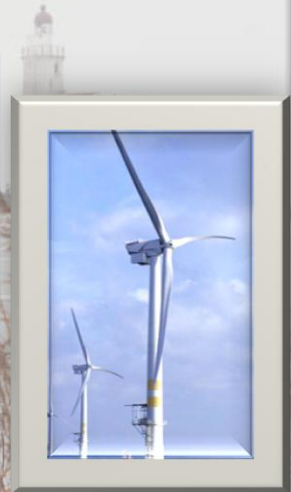
WAVE

- Waves are an unlimited source of energy
- The North Atlantic Ocean is very wavy and is where most technology is being developed
- There are many technologies being developed to harness the energy in waves – land-based, floating buoys, walls, and more.



WIND

- Wind blows consistently offshore
- Technology is available to harness wind to generate clean, renewable energy
- Building offshore wind farms could create many jobs and eliminate many tons of CO2 from being released into the air
- Harnessing offshore wind could produce 20% of Virginia's electricity needs



TIDE

- As the tides rise and fall the movement of the water contains much energy
- Turbines, like those used in wind energy generation, can convert the energy of moving water to electricity
- Energy from tides is clean and renewable

