



1
00:00:13,509 --> 00:00:11,910
do you ever wonder what makes hurricane

2
00:00:15,350 --> 00:00:13,519
so powerful

3
00:00:17,430 --> 00:00:15,360
i'm going to tell you

4
00:00:19,830 --> 00:00:17,440
now it takes energy to heat water to

5
00:00:21,910 --> 00:00:19,840
make it boil but did you know it takes

6
00:00:23,750 --> 00:00:21,920
many more times the amount of energy to

7
00:00:25,269 --> 00:00:23,760
change it just from liquid to water

8
00:00:27,670 --> 00:00:25,279
vapor

9
00:00:30,070 --> 00:00:27,680
now over the ocean the sun and the wind

10
00:00:31,830 --> 00:00:30,080
evaporate some of the surface water and

11
00:00:33,430 --> 00:00:31,840
that water vapor goes into the

12
00:00:35,430 --> 00:00:33,440
atmosphere

13
00:00:37,190 --> 00:00:35,440

later that water vapor makes it higher

14

00:00:38,950 --> 00:00:37,200

in the atmosphere where it cools and

15

00:00:43,190 --> 00:00:38,960

turns into liquid

16

00:00:44,950 --> 00:00:43,200

back the heat that it was used to

17

00:00:48,150 --> 00:00:44,960

evaporate it

18

00:00:50,709 --> 00:00:48,160

now how much energy is in that water

19

00:00:52,549 --> 00:00:50,719

every 5 gallons of rain in the hurricane

20

00:00:55,270 --> 00:00:52,559

represents the same amount of energy

21

00:00:57,590 --> 00:00:55,280

that you find in a gallon of gasoline

22

00:01:00,470 --> 00:00:57,600

and a single hurricane can rain hundreds

23

00:01:02,150 --> 00:01:00,480

of trillions of gallons of water

24

00:01:03,990 --> 00:01:02,160

that's enough energy to keep every

25

00:01:06,390 --> 00:01:04,000

single car and truck in the united

26

00:01:09,270 --> 00:01:06,400

states running for decades

27

00:01:11,030 --> 00:01:09,280

no wonder hurricanes are so strong