

Sunlight + Water = Tomorrow's Energy

Can you imagine burning water to get the energy you need to do things like drive or fly?

Of course not.

But water can be used as a starting point to make something that we can burn.

Water is actually made of two parts, like balls of different colors.

Each smallest part of water has two small balls and one larger one.

The small and large balls hold each other very tightly.

Tearing them away from each other is very hard.

It takes a lot of energy, but could be a very good thing to do.

Why?

Putting two large balls together
makes something we can breathe.

Putting two small balls together
makes something we can **BURN** to do work.

This is a way to store energy.

Burning the small balls

does not leave any leftovers.

It just makes water again.

It doesn't hurt us, the water, or the land.



So, why don't we already do this for all of our energy needs?

Remember, it is hard to break water into parts. It is also hard to put the bits back together in a different way.

Some living things know how to do this using energy from the sun, and we are trying to learn from them.

That is what our group studies.

Energy from the **Sun** is strong, and we have lots of it... but we have to learn how to use it.

We want to use that energy to break the water into its parts.

Then we will use a little more energy from the Sun to help the two small balls couple with each other,
making something to burn.

We are building all the different parts to do that and to store the sun's energy to use any time we like.

That means sunlight together with water can really be tomorrow's energy.