

Mila Age 8 Child's Play: Productive Play

I am excited to be taking part in the Snowy Hydro - Powering Up The Future Competition.

I've really enjoyed learning about it and discussing ways of creating smarter and cleaner more efficient energy for the future. I've watched documentaries, read books and spoken to adults about different forms of energy and tried to learn about all the different ways it can be produced.

I'll be honest, my first brainstorm included some crazy ideas like a cable car with a glass bottom and solar panels on the top and another idea was sticks poking out of the earth to catch the energy from lightning but I finally came up with something a little simpler.

My project is called "Child's Play: Productive Parks". It's a concept of children's parks that collect energy from the play equipment when the kids are simply playing and then that energy is stored and used to power community common areas, like street lights, amenities and surveillance devices etc.

The play equipment itself isn't a new invention. They are all things I have had the privilege of playing on at one park or another but in my concept, the play equipment is connected to the energy source, like kinetic energy, solar, electromagnetic energy and then stored in a battery system to be used.

In my concept drawing on the next page there is:

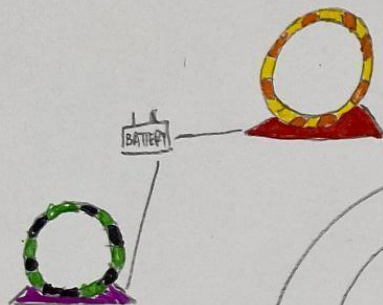
- Hamster Wheel: When the children run and make the wheel spin, it produces energy.
- Stationary Bikes: When the children pedal the stationary bike, the rear wheel is connected to a pulley system which collects the energy.
- Cubby Houses: These will be fitted with solar panels from the roof collecting the energy from the sun.
- Swings: When the children swing, the kinetic energy created in the back and forth motion is captured and converted into electrical energy.
- Spinners, Pole Spinner and Hold and Spin: All of these use the same idea- when children spin, they collect energy.
- Eating Areas: Fitted with solar panels from the roofs to collect energy from the sun.

You'll notice in my diagram, there is a gauge in the middle of the park. This is used to show the children how much clean energy they have produced in a day's worth of play. This can be reset every day.

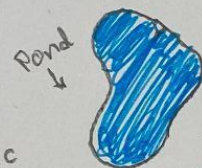
Think about how many communities there are in Australia and how many parks there are within those communities...one million, sometimes 2,3 or 4. There are 4 alone in Appin. I know how much I like playing at parks and I'm yet to meet any kids that don't. I always hear my parents say I have too much energy but imagine if by using energy from kids playing, we could create clean and sustainable energy to benefit our communities.

MILA - APPIN PS - 8 YEARS

Hamster wheel
HAMSTER WHEELS



STATIONARY BIKES



Pond



SOLAR PHOTOVOLTIC



DAILY GAUGE

showing how much play created energy



FLYING FOX



SOLAR CUBBY HOUSE



SPIN ZONE

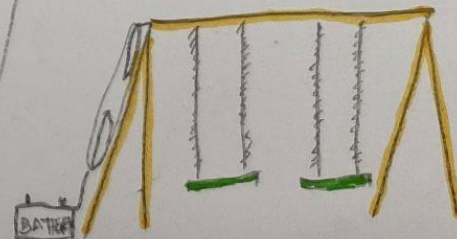
Pole spinner
pole spinner



Built in spinner



Hold n spin



SWINGS

