Entry 15 - Part One - Junior

What is the problem you are addressing?

The average three-bedroom house in Australia spends about $1,647 on electricity from the grid annually. Currently, 93.4% of Australia's grid energy comes from fossil fuels, with only 6.6% from renewable sources. This heavy reliance on non-renewable energy contributes to high carbon emissions and environmental degradation.

What is your idea?

My idea is to increase the use of renewable energy sources in Australia, focusing on a mix of solar, wind, hydroelectric, and pressure plate generators. I propose establishing companies that specialize in installing pressure plates in high-traffic areas such as hallways, pavements, and roads. This would complement other renewable energy sources and help reduce dependence on fossil fuels.

How does it work?

The pressure plate system works by converting kinetic energy from footsteps or vehicles into electrical energy:

1. When a person steps on or a vehicle drives over the plate, it pushes down on a crank mechanism.
2. This downward force is converted into rotational energy.
3. The rotating mechanism drives a generator, producing electricity.
4. The generated electricity is stored in batteries for later use.
5. This stored energy can then power various household electrical devices, including lights, TVs, computers, and kitchen appliances.

By implementing this system alongside other renewable energy sources, we can significantly reduce our reliance on fossil fuels and lower household energy costs. This approach not only makes economic sense for homeowners but also contributes to a more sustainable and environmentally friendly energy future for Australia.