



CLEAN ENERGY FARMING

Multi-Level Land Use in the Production of Clean
Energy



PROBLEM:

Current solar farms are singular in their purpose and make poor use of the available land.

SOLUTION:

Raise up the solar arrays and farm the land beneath.





DIVERSIFYING FARMING

Having multiple sources of revenue for a farmer or any business reduces risk. It allows for income across a range of streams which provide a balance against external factors such as weather and market prices.

Combining agriculture with energy is a perfect balance

COMPONENT 1: SOLAR PANELS

Solar panels to be elevated 4.8m above the ground level, approx. 1meter above the average height of a fruit tree below.

Located in the centre of the fruit tree open fields, the solar panels are to be fitted with gaps between to allow for sun to pass through during the course of the day.



COMPONENT 2: WIND TURBINES

Wind turbines are another layer that can harvest energy without impacting the solar or agriculture below.

In the production of fruit trees, the wind blades will act as a great deterrent for birds to reduce fruit damage.

Lower watt turbines are to be utilised to increase the hours of use and reduce the visual impact.



COMPONENT 3: BATTERY STORAGE

Battery storage is critical if you are to be serious about clean energy. 60% of energy usage is in the evening / night where solar is not generating. So battery storage is required to provide energy when the sun isn't shining.

VRFB Flow Batteries are a stable, long lasting solution to mass energy storage. They have a shelf life of 30 years + and cannot combust / explode.



BENEFITS

Adding solar and wind energy to the farming business model allows for early income streams while the farm is established, and produce is grown ready for market.

Clean energy will receive the backing of local government and subsidies which will be required for such a large upfront expenditure.

This extra layer of income stream to a farm is the layer of comfort for a successful business over time.

