

## What can possibly go wrong?

We know it's the right thing to do. While we have a low greenhouse gas intensity of electricity relative to other countries, ours has actually been increasing over the last five years.

Electricity prices always rise and the solar costs will stay the same.

It's pretty simple technology, I'm smart enough to handle the complexities.

And finally, I've got the money, why have someone else do it?

With all that, it can't be that difficult, right?

Wrong. Here's why.

### Lets start at the design stage.

Every roof is different. They have different materials, different ages, and different aspects. Output can vary by as much as [50%] between one roof and another. If you overbuild it will reduce your return. That is wasted capital.

Then we have different network standards. There are [28] distribution networks in New Zealand. Unless you are building a really big plant, you'll need to be connected to one or more of them. Guess what, they all have different requirements to connect. You'll be learning about just one when we have already learnt about many.

Regional variations also affect solar radiance. Some areas get markedly more than others. While we have NIWA there to guide us, we have experience to count on. We know whether the guidance will fit to the location. We have found that variations between modelled and actual radiance can be as much as [10%].

### Then there is the equipment

Like most things, solar panels come in many different qualities. We use the best. Our warranties and efficiency levels a beyond most other panels you will find on the market. For example, we use panels that have:

- 15 year product warranty as opposed to 10-12 normally
- 90% production at the end of 20 years vs 85% normally
- 20.86% Module efficiency as opposed to 19% normally.



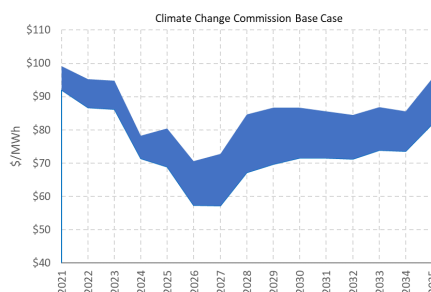
## What about installation, surely that must be pretty simple

Firstly, you will have to find qualified installers. Solar is popular now, for a good reason. Installers are hard to find, and good installers even harder. Ten years ago there were less than [10] solar installation companies in New Zealand. Today, Yellow Pages lists more than 200, and beware the cowboys. The installation costs as much as 25% of the total cost. Because we have on-going work, we have a good network of skilled installers right around New Zealand. And we know what is involved so costs remain manageable and reasonable.

## The electricity price continues to increase, right?

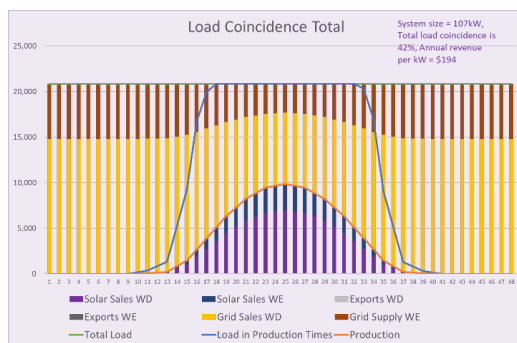
Isn't it a given. The past year is an example of what has happened year after year in the past. Whats more, as we electrify our process heat and transport sectors, electricity demand will grow. I'm confident history will continue into the future and support my sizeable investment in solar.

Why then would the experts at the Climate Change Commission think otherwise? They had experts look at the cost of technology, the demand, the scenarios with gas, Tiwai and Onslow. You can see their modelling here. They came up with a different price forecast.



We know the future may differ. Will Tiwai stay? Will Onslow get built? Will wind costs continue to decrease? The thing is, you've got your own business to run without needing to become an expert in electricity markets.

## It doesn't matter, I'll only size the installation for internal consumption so it only offsets my own costs and I won't be exposed to the market.



Hold on, that depends upon your load shape. That is complicated. We have found that in nearly every installation, to optimise it, you'll need to expect to export some output. We call this solar coincidence. Most businesses run at around 50% overlap between output and their load. The best we've seen is 75%. Expect to be exposed to the electricity market at least through your exports.



So you want to de-risk through hedging. I'll sell a fixed price contract for difference in those periods when I will be exporting. Okay, seems like a reasonable solution. Say, you've got a 250kW system that has contracted export output at 10c. Hang on, what happens if your solar is out when the spot price increases. If the spot price is 40c, you'll be paying your counterparty \$75 every hour, and this can last for months. Scary. And its not capped. It can get even higher.

**I'll make up any downside because my delivered price will always be high because it contains both lines and energy.**

Not so sure about that. Have you heard of a pricing roadmap? The Electricity Authority is requiring electricity network companies to change their pricing structures to prices that reflect the cost of service.

In general this means a move away from recovering costs through c/kWh to recovering them through time of use pricing or fixed charge pricing such as capacity or demand. Each network has a pricing roadmap. To most people it is gibberish. To us, it is our second language. Beware, the messages not understood.

**So what, I've got the money and can do this myself.**

If you a landlord, we get that solar assets are long-lived tangible assets similar to your building. However, they are in different markets. You've seen how electricity prices vary quite markedly from leasing space to businesses, and the risk profile is markedly different.

Then there is the hassle of doing the monthly stuff; reading meters, verifying and validating the data, issuing invoices, collecting and settling funds, re-contracting, and doing it all 12 months a year. No breaks. We can do all that for you, and generate you revenue, and give your tenants green credentials. A long term contract with us will add to your buildings value.

**And if you are a business owner, occupying a building you own, you should be aware that solar has a very long payback compared to most businesses.**

We have never met a business owner that couldn't do something well with extra capital in their business. Why use your scarce capital on building a solar installation at a relatively low return on assets with possibly higher risks, when you can use your capital on your internal projects to grow your business at often much higher return rates?

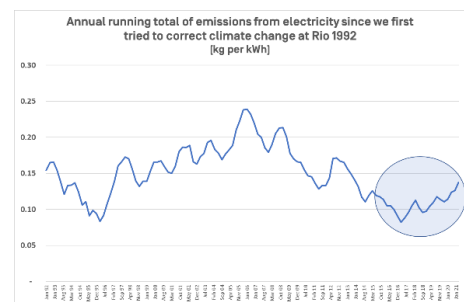


## We really don't mean to scare you.

We really only want to help you make the right decisions for your business. Utilise is here to help you do that. With us alongside you;

- The system will be designed and installed optimally because we live with the outcomes
- Your capital will be available for use on growing your business because we fund the solar installation
- You won't be scratching your head wondering why you ever got into the electricity business because we take all market price risk
- You can rest easy because we maintain the system and do everything that needs to be done each month
- You'll still get price or revenue benefits and still retain the right to own.

And, the environment will benefit by reducing the carbon footprint in our electricity. In most situations we have found that the installation solar will we will be over [50%] towards meeting our goal from the Climate Change Commission to achieve 95-98% renewable electricity by 2030, and over [75%] towards meeting the IPCC's target of 70%-85% renewable by 2050 in order to limit global warming to 2 degrees.



**Sound like this is the best option for you? Call us now on 0800 639363**