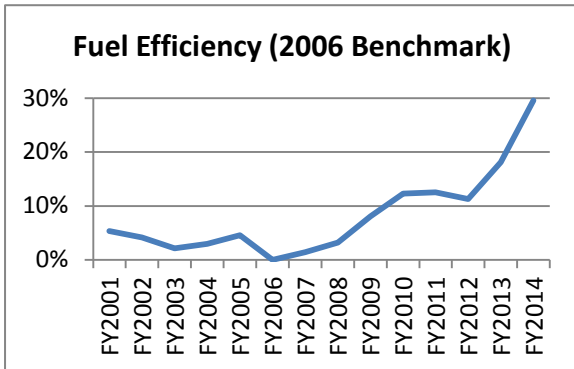


Renewable Energy Record - 33.6% in November 2014

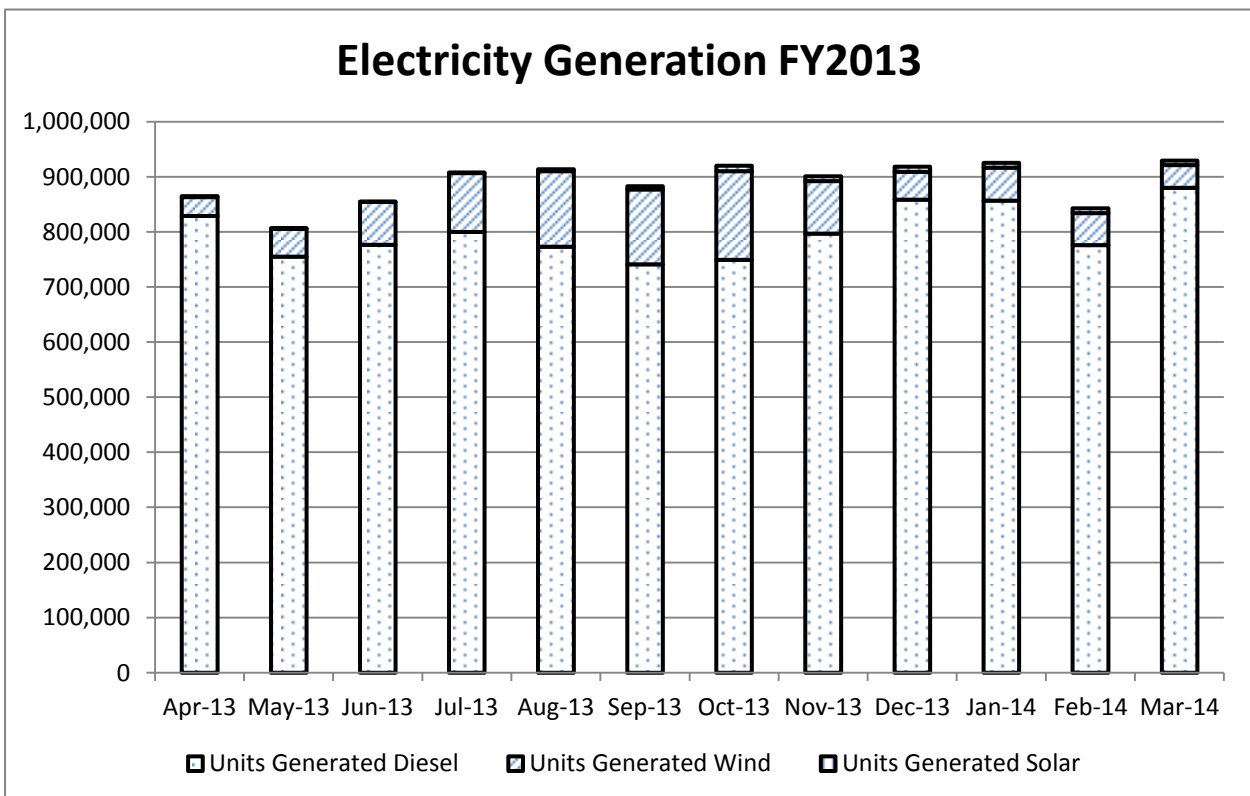
November marked another milestone in the renewable journey with a new record of **33.6%** of the islands electricity demand being supplied from renewable sources. Combined with the previous months the year to date figure is 22% so we are a couple of percent above our budget. So what does this mean? Firstly our green credentials are now world class, important for an aspiring high end



tourist destination. The more immediate benefit is reduction in fuel cost. I used the graph below recently to describe the combined effects of all fuel efficiency measures. With the last couple of month's results we now have even better numbers and are using 30% less fuel to generate each unit of electricity than in 2006. DfID provides subsidy to the island, these improvements in efficiency mean we require £0.6 Million less than we would without them. What happens to the

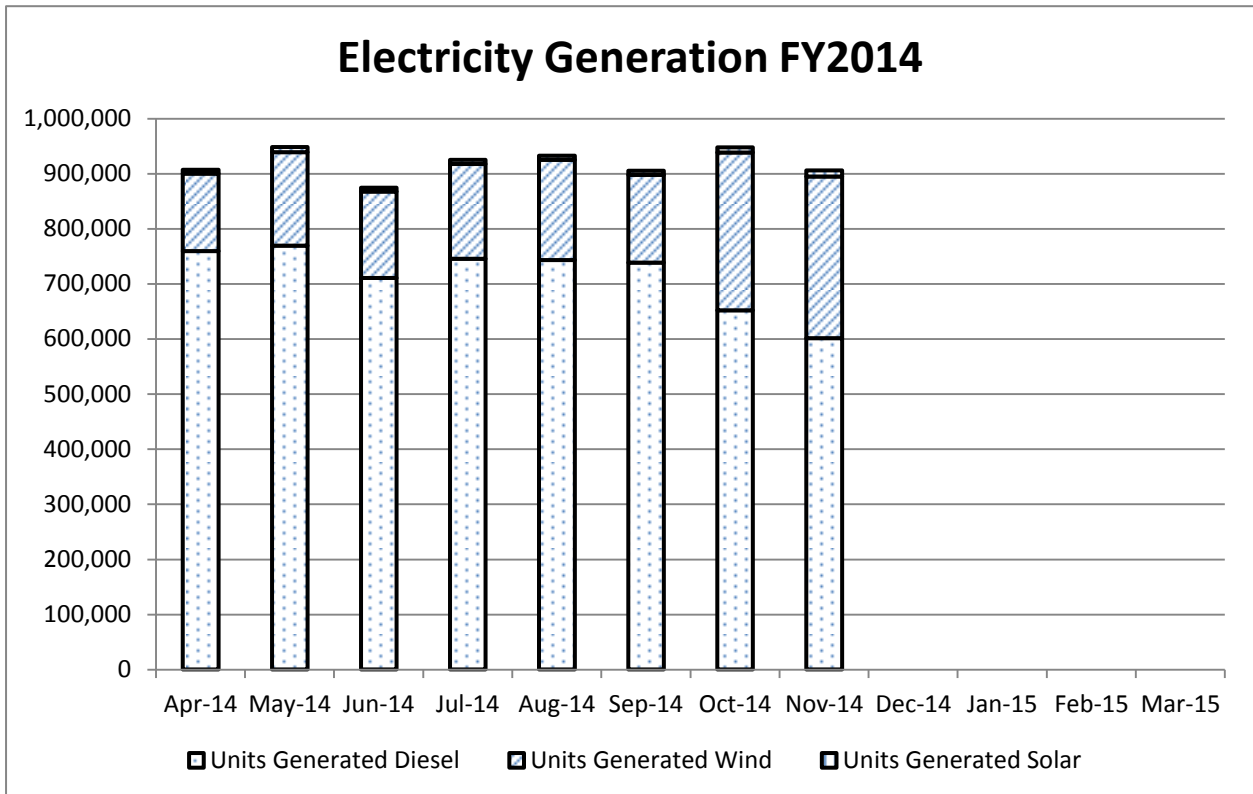
saving is outside of our control but it gives increased scope during SHG's budgeting process for funds to be directed to other priority areas, which is better for us than it going overseas to the oil barons.

People often ask exactly how renewable energy reduces costs. The simple answer is that as the wind blows or the sun shines the diesel generators do less work. The graphs illustrate:



The first graph is for the last financial year and the graph below is this year. The spotty portion of the bars are the units generated by diesel, the diagonal stripes show the wind contribution and the tiny bit at the top shows what we currently get from the small solar installations.

What do the graphs tell us?



Firstly the quantity of electricity supplied is about the same this year compared to last. The interesting feature is how the expanding stripy (wind) portion of the graph is compressing the spotty (diesel) section. If we compare this November to last the same amount of electricity was consumed but this year we paid for the diesel to generate 600,000 units compared to last year where we paid for the fuel to generate an additional 200,000 units.

What happens next?

Over the next few months wind yield will reduce because the weather will be calmer, this gives opportunity to maintain the turbines that have had a good few months of hard work. Looking forward to next year when we commission the new solar farm the tiny section at the top of the graph will expand. Assuming demand remains constant the expanded top (solar) section pushes down on the stripy (wind) middle section, since the load on the diesel generators is further reduced they throttle back and the spotty (diesel) bottom section reduces in size, and so does the fuel bill leaving SHG with more cash to allocate elsewhere during their budgeting exercise.

Barry Hubbard – CEO Connect Saint Helena Ltd.