



## The Prospect of Free Electricity



By Dr. DeLisle Worrell Governor Central Bank of Barbados

Meteorologists tell us that Barbados enjoys 8 to 9 hours of sunshine daily, all year round. That sunlight provides every home in the country with more energy than it could ever use for all our needs for electric power, cooking and transportation. Unfortunately, most of that energy comes in the form of heat, which cannot be easily converted to a form that is useable for any purpose other than heating water. As recently as five years ago, it was so expensive to convert sunshine to electricity that the average middle income household could not seriously contemplate doing so.

However, the prospect has changed dramatically in the last few years, with the introduction locally of affordable photovoltaic systems for households.

You can now buy a system that will supply your entire electricity needs, reducing your average monthly payment to The Barbados Light and Power Company Limited (BL&P) to zero, for less than half the price of a new standard-sized four door family sedan.

You can obtain financing from banks, credit unions and other financial institutions for the purchase, on terms that are affordable. You will be able to claim a rebate on your income tax for the expenditure on your system. From the time your system becomes operational you will never have to pay another monthly electricity bill, and once you have fully repaid your loan, you will be supplying your own electricity from our abundant sunshine, free of cost.

I am exaggerating, of course, but only a little. Your system will come with a guarantee of perhaps twenty years, but you will eventually need to upgrade or replace it, so you will need to set aside amounts for depreciation. You will also have maintenance costs and the cost of additional property insurance, to ensure your system is covered in the event of disaster.

There is an additional cost that householders will have to bear. The systems that middle income households (think of those who can afford a newish family sedan) can afford are linked into the BL&P grid. In the daylight hours they produce more electricity than they need, and they sell the surplus to BL&P. At night and on cloudy days BL&P sells that surplus back to the household. There are more than a dozen commercial suppliers who can design your system so that, on average, those two amounts balance out. However, for the overall system to remain viable as more and more consumers install their own systems, each one will have to pay BL&P some amount for providing this storage capacity. The power company is happy to receive this payment in kind, so households would need to supply more than they buy back, to break even.

The bottom line: installing your own solar PV, if you can afford the monthly payments, is the best thing any Barbadian household can do to increase its earning power over the long term. Government will help you with financing via a refund on your income tax, and once your system is fully paid for, you will be generating your own electricity, free of cost. Your only expenses will be the increase in maintenance and depreciation costs on your property. The savings in electricity costs annually would be considerable.