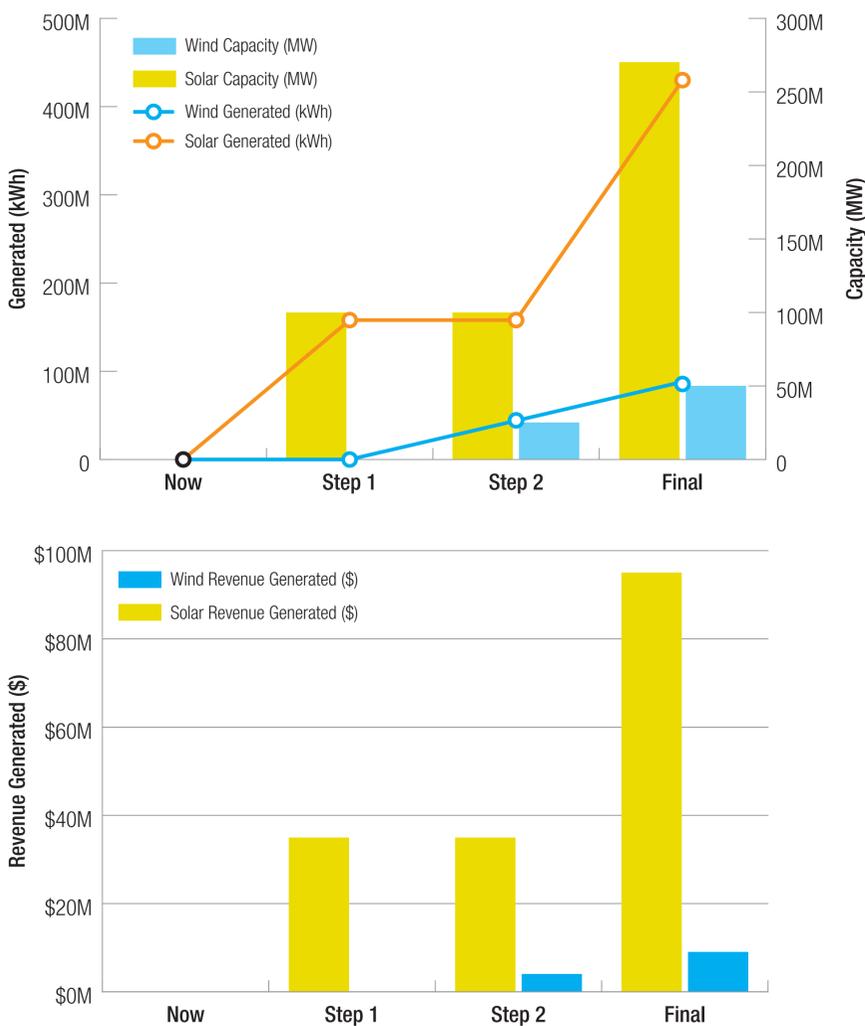


# Department of Education: FROM BILL-PAYER TO CLEAN POWER SUPPLIER

The Energy Efficiency and Sustainability Master Plan (EESMP) looks to deliver a coherent package of measures that will change the energy equation for the Department of Education – by reducing its energy usage, in parallel with a build-up of its own onsite clean energy production. This will produce immediate energy and cost savings, as well as a broadening stream of new revenue, as Power Production Agreements for each new energy source come online. Preliminary scoping suggests that, in aggregate, an initial installed PV base of 100 MW could produce 158 million kWh of electricity. That could ultimately be scaled to over 270 MW of solar PV, and 50 MW of wind power:



That would be enough to meet all of the Department’s energy needs, while providing for a clean energy surplus with a net revenue of \$104 million. The Department will have transitioned from being a consumer of expensive and polluting energy, to a major producer of low-cost clean energy. This will allow for the DOE to raise its level of investment in core educational resources, even as it faces increasingly stringent budgetary conditions.

But there are other important benefits flowing from the successful implementation of the EESMP.

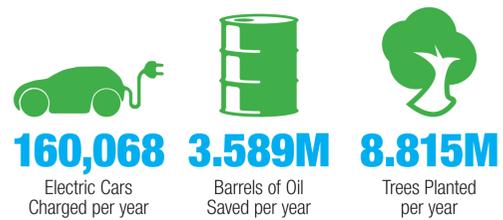
### OPENING THE VIRTUAL CLEAN ENERGY PLANT

The EESMP program opens up the prospect of allowing the DOE to link its disparate energy sources together, into a single virtual Independent Power Plant. That would enable the DOE to offer critical new services to the utilities’ burgeoning Smart Grids – vital components of Hawaii’s larger energy transformation under the Hawaii Clean Energy Initiative.

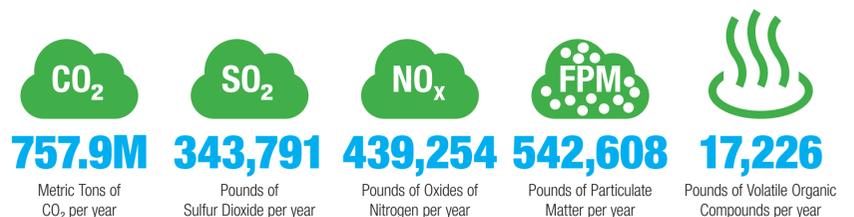
But the clean energy potential waiting to be unlocked from the Department’s portfolio of schools, and other facilities, will do more than easing financial burdens, raising investments levels in our youth, and playing an important role in catalyzing the State’s clean energy switch. It will also demonstrate the way forward, for other State Agencies to follow, as the new energy frontier is developed.

### REDUCING THE LOAD

It will also ease the environmental burden that burning fossil fuels places on Hawaii’s people, wildlife and climate. The envisioned clean energy to be generated is equivalent to:



It will also clean up the air we breath, removing:



This poster was donated to the Hawaii Department of Education by the Association of Energy Engineers (Hawaii Chapter) and R. P. Delio & Company.