

Luaseuta Foundation

Think Tank

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Tuvalu citizens
Funafuti
Tuvalu



Re : Analysis of the increase price oil on the nation Tuvalu and strategies to lower the price of energy.

Dear All,

The increased cost of energy from fossil fuels, mostly in the formal diesel and petrol to create electricity and run fishing boats, and the transport system will continue to increase.
The CEO of Shell has stated that they believe oil will go to USD\$200 a barrel by 2012.
In converted turns the price of petrol could go to five to 10 dollars a litre wholesale.

What will be the effect of this on the country?

- 1) The electricity cost using diesel powered turbines on Funafuti will go from \$1.4 million a year in diesel costs to \$3-7 million a year.
- 2) Commercial fishing boats will not be able to afford the cost of fishing Tuvalu waters. Thereby in the leases revenue will drop from boats fishing Tuvalu waters.(boats have stopped fishing in New Zealand/Spain etc)
- 3) The cost of the commercial airline, Fiji Tuvalu will be pulled from service.
- 4) The oversupply of government inter island boats in will not be able to pay for oil and the increased cost of parts will cause the end of service.
- 5) The price of food will double or triple. (In food costs in Australia have risen by forty percent in the last year)
- 6) Cost of all spare parts and transport costs to the islands will increase or have to be removed
- 7) Domestic use of motor vehicles and motorcycles will drain the household income of average families
- 8) This gradual increase in prices will happen over a number of years in a stepped fashion.
- 9) Cost of all steel products will continue to rise.
- 10) Massive national budget shortfall all expenditure on oil.

Did you hear about the frog slowly boiled to death in a pot because the temperature increased slowly.?

The higher price of energy is affecting every nation in the world. National leaders will have to either be proactive in winning their nation off fossil fuel or we'll all end up frogs. The Luaseuta foundation think tank, lobbies, Tuvalu's leaders and decision-makers to make investment decisions now. To counteract the above realities and invest in alternative technologies now for the production of power. The simple statement "we can't afford it", needs to be understood by all and "pay now or pay later" by the government.

Energy investment.

Tuvalu has abundant sustainable energy from wind/solar/ water turbine and coconut oil. The third and fourth-generation technologies are now commercially available for sustainable energy supplies. Energy supply needs to be through hybrid systems ie percentage solar percentage of wind etc
A local industry grow supporting these technologies are needs to be encouraged in instead of fuel-based technology eg car mechanics etc. It must be remembered that Tuvalu was sustainable for two thousand year only in late seventies did the country start to end this.

Investment Goals

- 1) Sustainable electricity on the outer islands 100% combination wind turbine, solar or water turbine and 80% on Funafuti.
- 2) Fishing practices brought back to the old ways
- 3) Casual use of fuel is made to expensive. "bike to work"
- 4) Locally produced a bio fuel.

Proposals.

Government view this as a national crisis similar to war to be solve now an investment money is needed, taken from the investment fund to buy assets. Remember that the life of a wind turbine is thirty years and repays itself in ten That means in ten years, power will be free!!

Investment one

Total present cost of all fossil fuels used in a year by the nation, matched one to one in investment in wind generators an investment. Say 2-3 million dollars a year.Example build national windfarm's on each island.

Investment two

Fishing yachts purchased and donated to the main islands Kaupue and a yacht training section added to the marine school

Investment three

Acquisition of coconut oil technology from the Solomon Islands as an additive into diesel.

Investment four

Subsidise and encourage personal investment. In sustainable technologies

- 1) Increase the tax on petrol for domestic use at the petrol .
- 2) Give a tax subsidy to bicycles
- 3) Increase the price of electricity, including the government departments.
- 1) 4), removes any subsidies of petrol to the outer islands
- 2) 5), removes the sale of non-fluorescent lights.
- 5) install the ability for personal sale of electricity into the grid and they are paid three times the domestic rate.
- 6) It Subsidise wind turbine and solar for personal use.
- 7) Local Coconut oil subsidised to undercut imports for cooking.

There's no such thing as a free lunch

The maintenance and running costs of all donated national aid assets needs to be looked at very seriously and maybe declined , whether they be new boats or power stations. etc . In favour of sustainable technology.

Links in the latest technology.

Wind turbine

Info http://peswiki.com/index.php/Directory:Vertical_Axis_Wind_Turbines
http://www.ecobusinesslinks.com/vertical_axis_wind_turbines.htm

commercial

<http://www.tmawind.com/index.php>
<http://www.windside.com/products.html>

personal

<http://www.energymatters.com.au/wind-harvester-36volt-1000w-vertical-axis-wind-turbine-p-906.html?zenid=dbe4795a86786b2502c9f6f2d8ee596c>

Next-generation solar

<http://www.renewableenergyworld.com/rea/news/reinsider/story?id=51031>
http://en.wikipedia.org/wiki/Copper_indium_gallium_selenide
<http://www.nanosolar.com/>

Water turbine (accessing tidal flow)

<http://www.absak.com/library/micro-hydro-power-systems>

Coconut oil

http://en.wikipedia.org/wiki/Coconut_oil
<http://www.pelenaexpress.com/boat%20information.htm>

Kind regards
Geoff Ludbrook