

Marshall Islands Chamber of Commerce

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Meeting Minutes

Wednesday, June 23, 2010

Marshall Islands Resort

Meeting called to order by President Steve Phillips at 12:15 P.M. Approximately 30 members and guests were in attendance. The next regular meeting will be held the week of July 19th, 2010, unless otherwise scheduled to accommodate a guest speaker.

- **Minutes** – approved electronically prior to the meeting

- **Guests**

- Nicholas Wardrop, National Energy Adviser, Ministry of R&D
- Martha Campbell, American Ambassador
- Allison Bybee, Summer Intern, US Embassy
- Derrain Cook, US Embassy
- Taai Tamare, DAR
- Peterson Jesse, Ministry of R&D
- Walter Myazoe, Ministry of R&D
- Kemme Ito, Ministry of R&D
- Angeline Heine, Ministry of R&D
- Yvette Lee, Mxtran
- Andy Hsin, Mxtran

- **Chamber President's opening remarks**

Welcome to the June Chamber of Commerce meeting. We'll have some brief opening remarks about the newly announced Bank of the Marshall Islands mobile banking service. After that, please join me in welcoming our guest speaker Nicholas Wardrop.

- **Yvette Lee remarks**

My company, Mxtran – a Taiwan company, has provided some of the software and related hardware technology that is now used by Bank of the Marshall Islands (BOMI) to offer their mobile banking solution. We've worked with BOMI, the National Telecommunications Authority (NTA), and the Majuro Electrical Company (MEC) in a collaborative effort to allow you to use your cell phone or other mobile device (handset) to access you bank accounts, purchase telephone minutes, or pay your electric bill in the near future.

The system begins with the installation of a thin electronic film on top of the handset's SIM card. This film contains the software with security features that the handset uses to send specially crafted text messages to NTA. NTA then routes these special messages to BOMI. BOMI application software acts on those messages and sends a result to our application software that we installed at BOMI. That software then creates a text message that is routed back through NTA to the originating handset.

- **Nicholas Wardrop remarks**

Mr. Wardrop's PowerPoint presentation and subsequent demonstration presented the following concepts about renewable energy:

- New technology requires electricity
- What you don't measure you cannot manage
- The world is now at what is called "peak oil" where the total demand for oil exceeds the supply. The global fuel supply is not expanding as fast as the demand. This causes the price of fuel to rise.
- In the context of the transportation of fuel, the Marshall Islands (RMI) is at the end of the fuel supply chain. This also raises the cost of fuel.
- Our studies indicate that the RMI is 90% dependent on oil, 9% on biomass, and 1% on solar.
- In the context of supply side management, MEC is currently studying the requirements of electricity generation and distribution. Their goal is to reduce electrical consumption/loss 20% by 2020.
- In the context of demand side management, we need to achieve a 30% saving in the next decade.
- To accomplish these goals we need to use energy conservation and energy efficiency.
- Use the appropriate fuel for each task. For example, propane is more efficient in creating heat than diesel fuel.
- Incandescent lighting is not as efficient as fluorescent or LED lighting.
- Most air conditioners that are imported into the RMI are not energy efficient. When importing from the US we should choose "energy star" rated appliances. However, these are more expensive. Buyers need to pressure importers to bring in more efficient electrical appliances.
- R&D is performing energy audits and has trained 20 energy auditors to use available monitoring equipment.

- Buildings can be improved to require less electricity. Roofs should have a light color. Ventilation can be improved. Shade trees can be planted on the western and eastern sides. Corroded air-conditioners can be cleaned or replaced. Air-conditioning filters can be regularly cleaned. Incandescent light fixtures can be replaced to support fluorescent tubes, compact fluorescent lights, or LED lights to use as much as 80% less electricity.

- Offices can be improved to require less electricity. Laptop computers use less electricity than desktop computers and don't require a battery backup unit that itself consumes electricity. If a desktop computer must be used then the monitor should be an LCD or LED type that uses less electricity. Only printers that go into sleep mode should be used.

- Our experience is that in this region 50% of the total energy used is consumed by land, sea, and air transport.

- Achieve energy efficiency first and then deploy renewable energy. There can be a significant multiplier effect that reduces your future renewable energy cost from every dollar spent upfront to reduce energy consumption.

- R&D is installing wind monitoring towers to evaluate the use of wind power. However, it should be noted that when it comes to wind generators, so-called marine grade equipment is required in the Marshall Islands. There aren't many manufacturers that offer this.

- There is a country energy policy, and it is on the government's Website.

- **New business**

There will be a privately sponsored July Fourth party at the Marshall Islands Resort's poolside from 4 – 6 PM on Sunday, July 4th. The admission price for adults is \$10. Food is provided. Beverages are not provided. Everyone is invited.

Meeting adjourned at 1:30 PM.

Minutes prepared by:

Jim McLean