

Fukushima Surprises

(Notes on the Philippine Nuclear Debate)

Max Maquito, Ph.D.

Sekiguchi Global Research Association

Temple University Japan

fcmaquito@gmail.com

Surprise #1: Bataan Nuclear Power Plant



wikimapia.org

Layder 2012

Surprise #1: Bataan Nuclear Power Plant

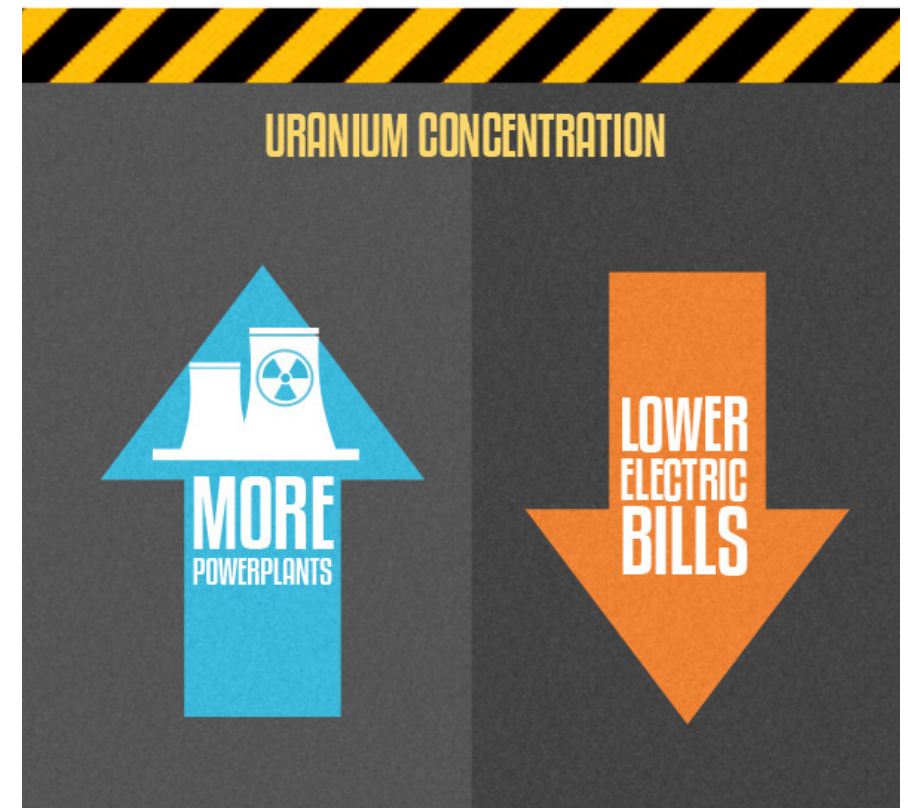


Surprise #2: Pro-BNPP in Post-Fukushima (+ KKK Evaluation)

- Efficiency (*Kahusayan*)
 - Nuclear power is cheap energy
 - [Nuclear power] addresses our looming energy crisis. The BNPP is designed to produce 621 Megawatts of energy, and at a cheaper rate than coal.



ESTIMATED COST TO
CLEAN UP: US\$250 – 500
billion (and still
counting!)



Surprise #2: Pro-BNPP in Post-Fukushima (+ KKK Evaluation)

- Efficiency (*Kahusayan*)
 - Nuclear power is cheap energy
 - BNPP is considered safer than Fukushima.



Fukushima NPP was
considered safer than the
Chernobyl NPP

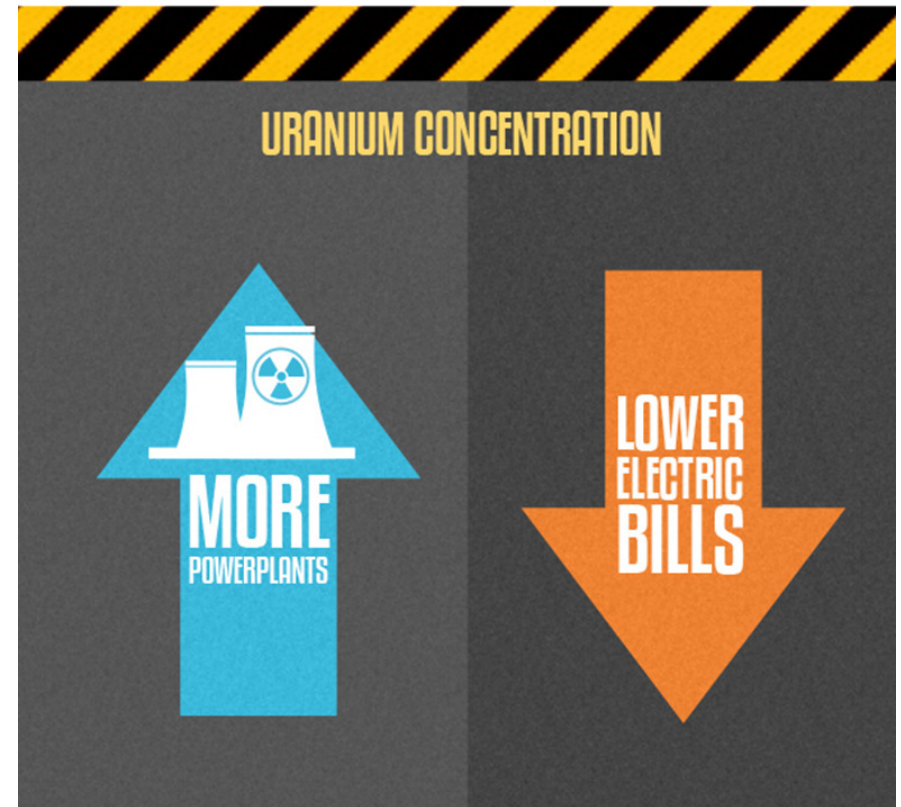


Surprise #2: Pro-BNPP in Post-Fukushima (+ KKK Evaluation)

- Equity (*Katarungan*)
 - Bill Gates said it best: In fact, if you could pick just one thing to lower the price of, to reduce poverty, by far you would pick energy.



- Japan's NIMBY Policy in Siting NPPs
- NPP firms enjoy the profits but share the risks with society



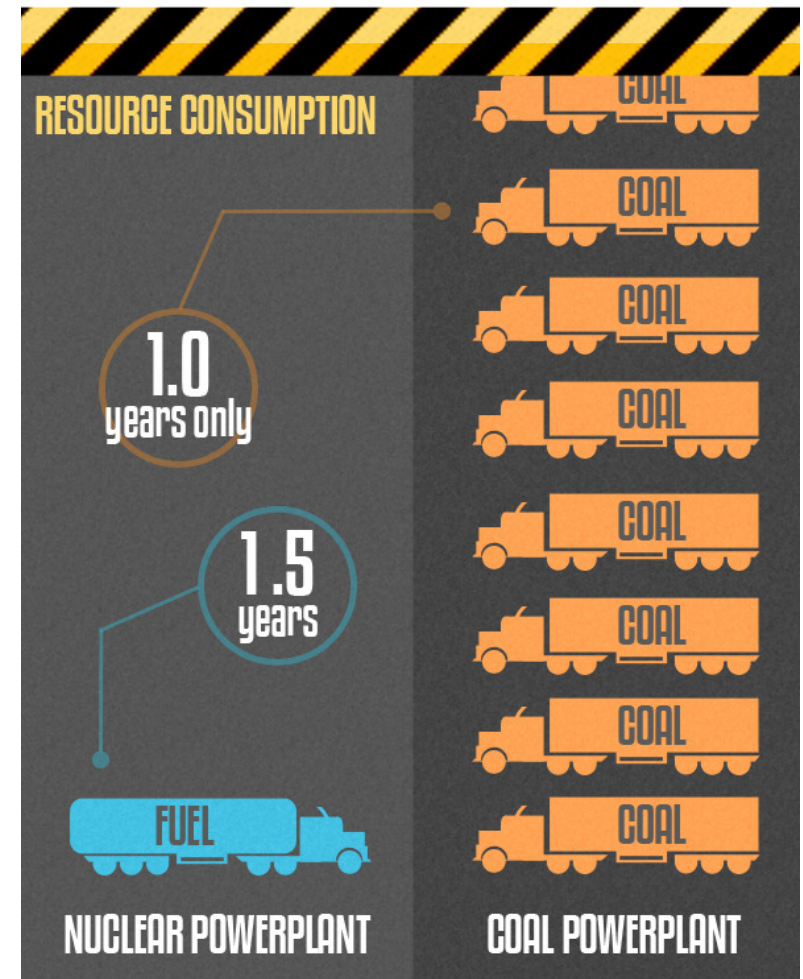
Surprise #2: Pro-BNPP in Post-Fukushima (+ KKK Evaluation)

- Environment (*Kalikasan*)
 - Nuclear energy is clean energy
 - Nuclear power requires only one truck of fuel for eighteen months and does not emit CO2 upon consumption.



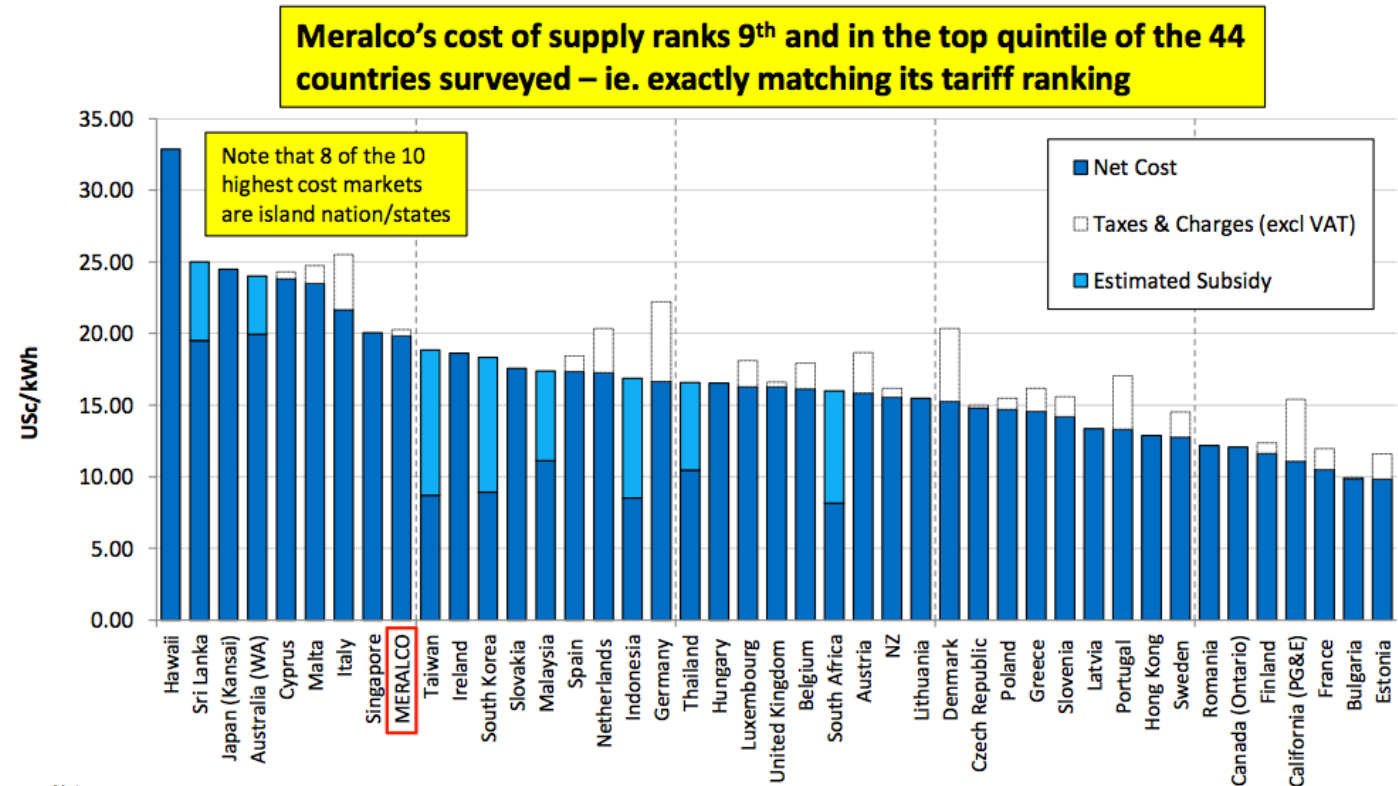
On average each plant will produce 30 tonnes of waste a year and this waste can be radioactive for up to 250,000 years. The lowest available estimate for the storage of 1 tonne of nuclear waste is US\$35,000 per year, so that's a minimum cost per facility of over US\$1 Million per year for the conceivable future.

The main problem caused by nuclear waste however is where to store it, since even nuclear waste processed in storage casts takes 10,000 years before it will reach levels of radiation considered safe for human exposure.



Surprise #3: Fukushima Hope for KKK Development of the Philippines

- Efficiency (*Kahusayan*)
 - Philippine power rates one of the highest in Asia

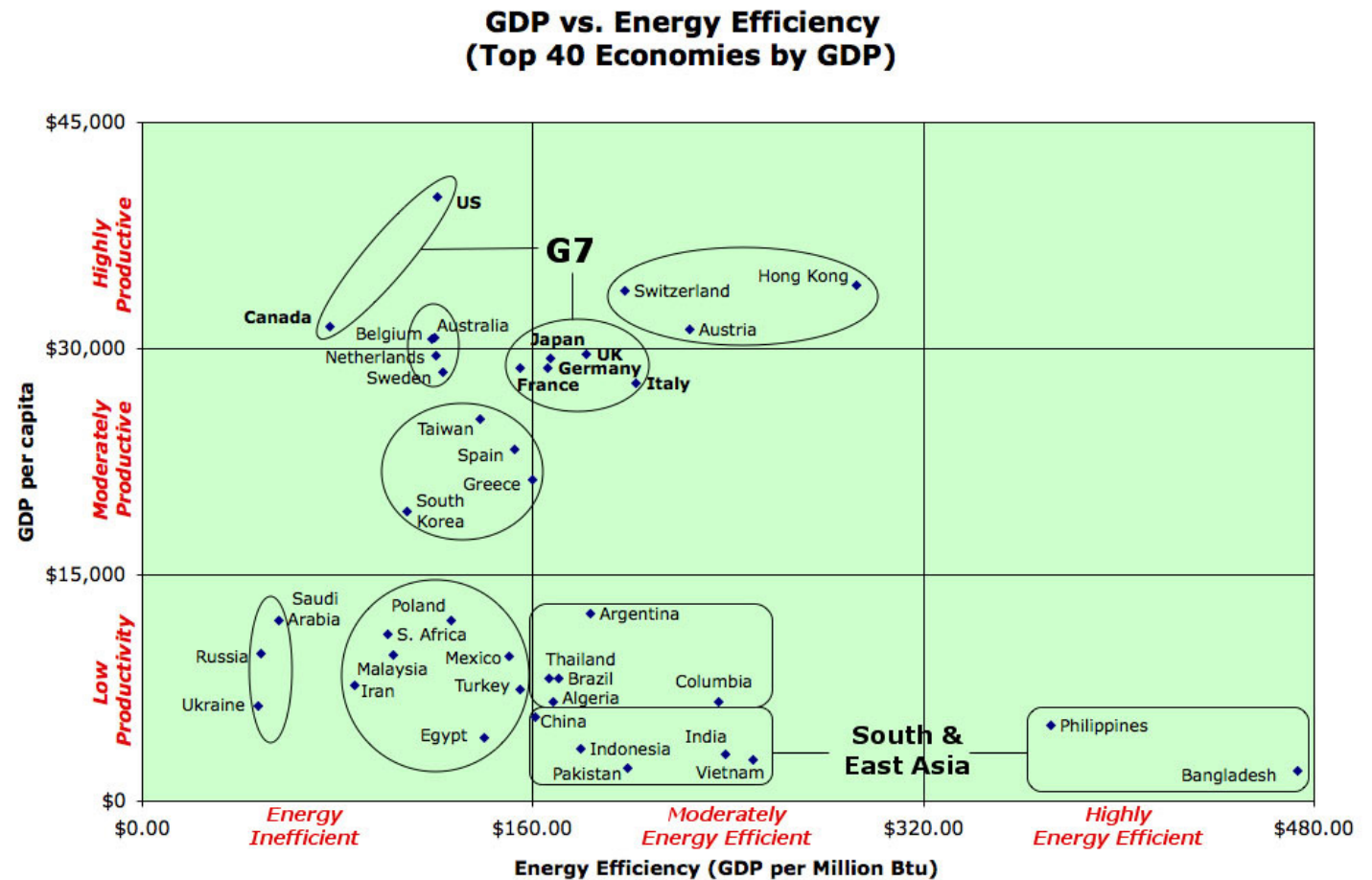


Notes

1. Weighted average tariff (all customer categories)
2. Tariffs for 50 US states (excl Hawaii and California) and Euro countries are for Nov 11. All other countries/states are for Jan 2012
3. Assumes tariffs in 50 US states and Europe are cost-reflective (ie. no subsidies)
4. Estimated subsidies are based on long-run intrinsic cost of supply (including fuel subsidies) calculated by IEC

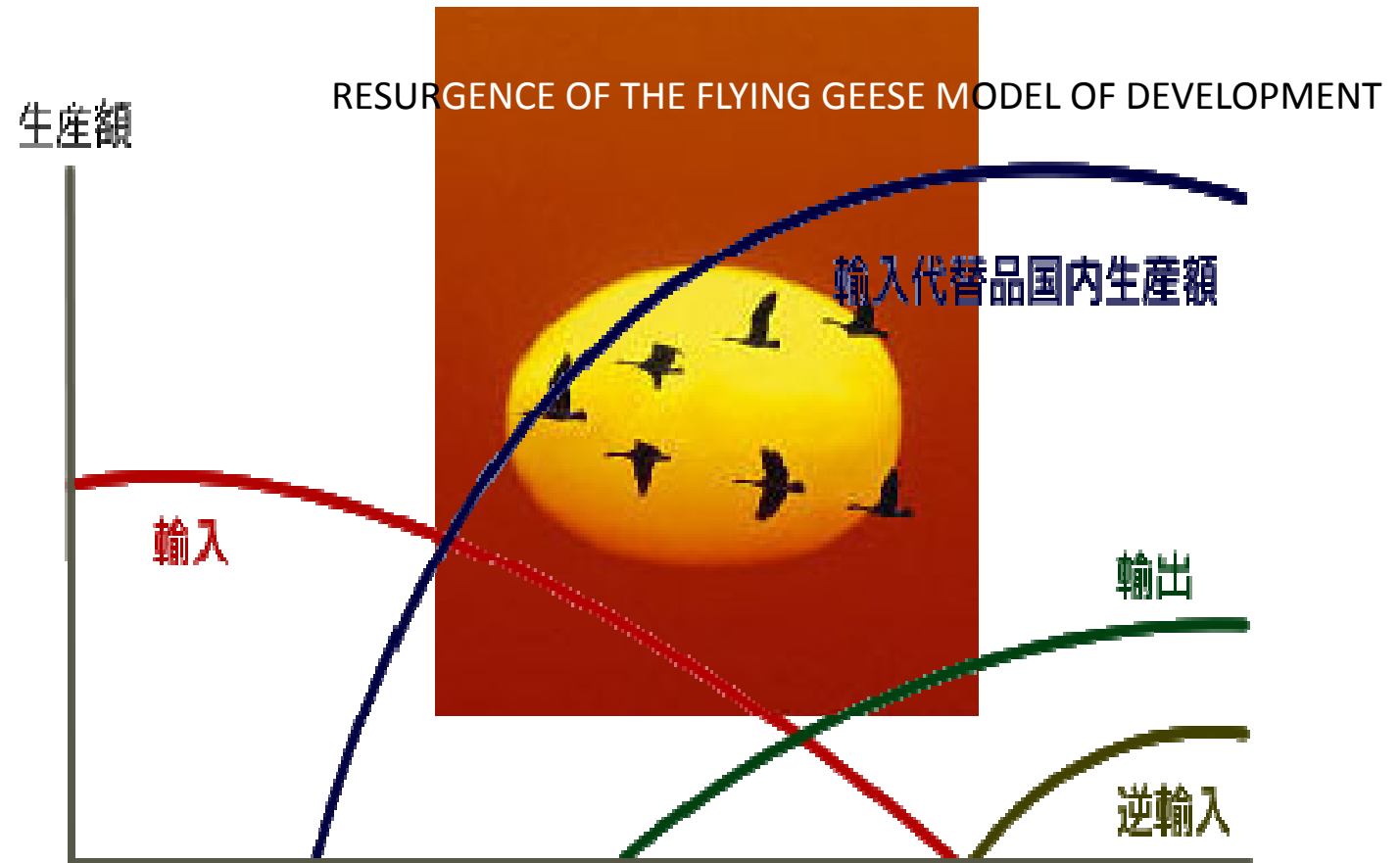
Surprise #3: Fukushima Hope for KKK Development of the Philippines

- Efficiency
(*Kahusayan*)
 - The Philippines is a relatively efficient energy user
- MANUFACTURING IMPLICATIONS
 - More energy efficient devices
 - Alternative energy sources



Surprise #3: Fukushima Hope for KKK Development of the Philippines

- Equity (*Katarungan*)
- MANUFACTURING IMPLICATIONS
 - Stronger links between SMEs and Assembling Firms
 - Stronger links between the Philippines and Japan, as well as other East Asian countries



Surprise #3: Fukushima Hope for KKK Development of the Philippines

- Environment (*Kalikasan*)



...when the only major source of radiation is the tropical sun!

