Hawai'i must prepare now for oil decline

By Manfred J. Zapka and Jim Dator

A recent article by Chris Grandy discussed the costs versus benefits of making Hawai'i less dependent on imported goods and energy.

It inspired us to think of possible future scenarios for Hawai'i that hinge on this important issue. Are efforts at decreasing Hawai'i's dependency on imported goods and energy worthwhile if these measures result in near-term cost increases for Island residents and visitors? Should we not anticipate and plan for the future but just let the market decide?

The essence of the matter is how we envision the future and whether we adjust our actions accordingly.

Oil is at the heart of Hawai'i's future since we have one of the highest per capita consumption rates in the world, close to twice as high as average U.S. consumption and four times as high as the average rate in Europe. Oil powers virtually all our ground transport and all of our sea- and air-born transportation. Oil is also the primary feedstock for our electricity generation.

Hawai'i's plans for a bright future are solidly built on the assumption of an expanding global supply of oil. Without abundant oil, things do not look so promising. Indeed, a shrinking global supply of oil might be harmful for Hawai'i's economy, reducing tourist arrivals, deflating real estate values and resulting in significant economic contraction.

Is there any danger that we will run out of oil in the near-term? No — but long before the last barrel is produced, and most likely in the very near future, the world will witness the peak of world oil production, or "Peak Oil" in the popular term.

After Peak Oil, production of oil will diminish year after year due to the natural decline of oil fields, which go through an aging process like we humans do. Current energy planning generally assumes "youthful" global oil production that can expand to provide almost any desired volume. But in fact many giant oil fields have passed their prime and show alarming declines of oil production rates.

Predicted Peak Oil dates vary, depending on assumptions, some pessimistic, some optimistic.

Typically oil predictions of government agencies and conservative economists are optimistic, placing Peak Oil decades (but not centuries) into the future. Hawai'i's energy planners, for example, contemplate a 2037 peak date and suggest there is no urgent need to consider diminishing oil supplies anytime soon.

But if peak predictions of governmental agencies and the oil industry are scrutinized, peak dates between 2010 and 2016 appear more probable. This could mean that Hawai'i's economy has only five to 10 years to prepare for operating with steadily diminishing oil supplies.

A 2005 U.S. Department of Energy report warns that earnest mitigating measures must be started at least 20 years before peak date to avoid most, and 10 years ahead to avoid the most severe, negative fallout from Peak Oil. Major energy policies and infrastructure developments in Hawai'i fall well within that time frame.

Best-planning practices should call for an immediate start to introducing significant energy conservation and other Peak Oil preparations in Hawai'i. Investing in measures that make Hawai'i less dependent on
imported goods and energy are steps in the right direction, since Hawai‘i will be able to realize benefits in a future tight energy market.

Some years ago, Jared Diamond cited the history of the Polynesian island Rapa Nui (Easter Island) as a cautionary tale for Planet Earth. If what he says is accurate, it clearly serves as a warning for a remote island community like ours as well.

According to Diamond, Polynesian travelers sailed to, settled and prospered on the very isolated Rapa Nui for many generations. They traveled back and forth to other Polynesian islands while also relying on their canoes for deep-water fishing (Rapa Nui had no reef for smaller fish and scant birds and land animals to eat). But the inhabitants eventually cut down all of the tall trees necessary for sturdy sailing canoes. They were stranded on their island with rapidly depleting resources that drastically lowered their quality of life and led to democide with significant population decrease, and perhaps cannibalism.

Diamond asks us to imagine what the inhabitants were thinking as the tall trees were being cut down. What arguments might have been made, pro and con? And what were they thinking when the last tall tree on the island was felled and they were trapped?

What are we thinking now as we approach Peak Oil with absolutely no comparable energy source readily available to us that we can substitute for the most versatile and valuable form of modern energy, oil?

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