



CGSA
CENTRE FOR GLOBAL
STRATEGIC ANALYSIS
SECURING FOOD AND ENERGY

CGSA

Global Armageddon: Iran - the strategic master plan

Version 1.8.2
30 December 2011
Classification: P/Public

Author: Babak Madadi

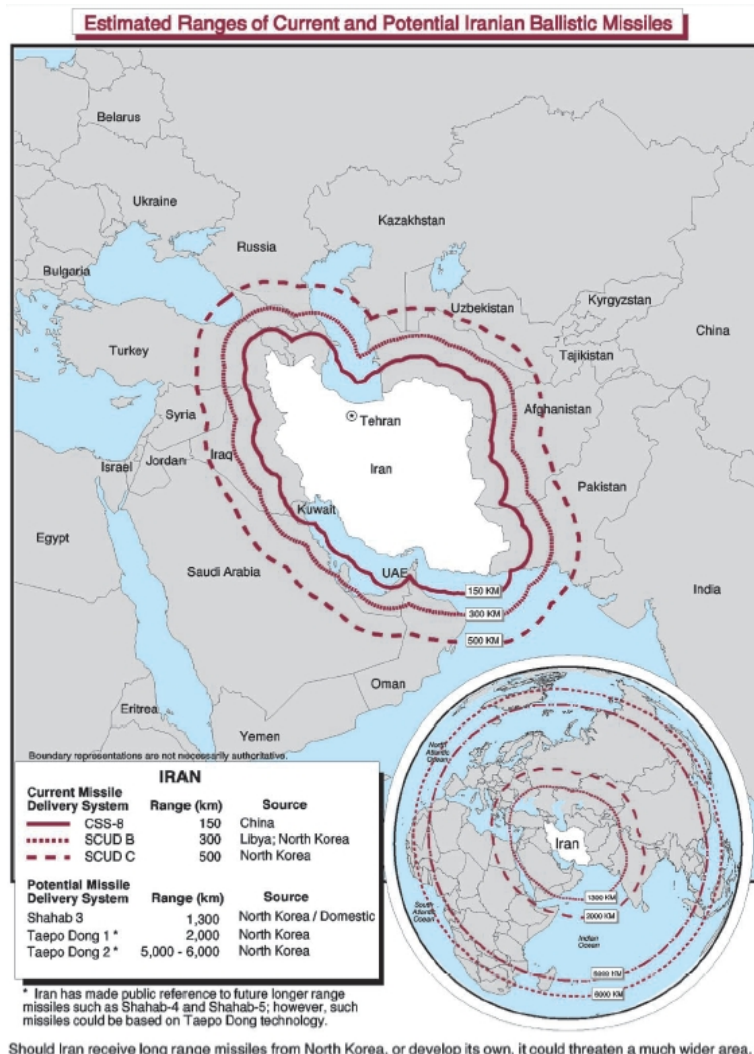
WWW.CGSTRAT.ORG

© 2011 by the authors.

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).

Is there a secret master plan for Iran?

The short answer is: Beyond provoking Iran there is little evidence of a coherent master strategy. This report highlights hidden pressures which are driving the geopolitical tensions between the west and Iran along with the possible dangers. The situation is complex with many interconnected issues. Such as an energy crisis resulting in the collapse of the US empire.



Source: U.S. Department of Defense, Office of the Secretary of Defense, Proliferation: Threat and Response, January 2001, p. 37.

Think of a stand off, with the OECD having a gun to Iran's head, while Iran has a gun to the head of the OECD. Unfortunately the end of cheap energy is eating at the OECD like a terminal cancer. Without treatment and facing certain death the OECD will one day experience so much pain that the stand off will inevitably break down catastrophically.

“Who controls the food supply controls the people; who controls the energy can control whole continents; who controls money can control the world.” —Henry Kissinger

During the exponential growth of humanity when there was a surplus of cheap resources, money probably provided the ultimate power to control. Now that high grade resources are fast depleting shortages are worsening.

"From now on any one who believes that money is more important than food or energy is not only an optimist but may soon be starving in the cold and dark" - Babak Madadi

Time Lines:

How soon will the US and the OECD collapse?

On current trends over the next 5-10 years there will be a rapid decline in the EROI of global energy production. This effect may be magnified by a 30-80% decline in global oil exports during this time period. As a result US and OECD power will probably rapidly collapse over the next few years. The dominance of the OECD countries which emerged during the last 500 years will probably end within 5-10 years.

If Iran destroys the oil and gas facilities of the Persian gulf then the OECD economies will collapse and may lose the ability to project power at a distance within 6-30 months. Followed by a reduction in food production and carrying capacity within 3-10 years. OECD populations may decline by 80-97% within 20-50 years.

How long can Iran hold on?

Iran is self sufficient in almost all essentials from energy and raw materials to manufacturing capacity. However on current trends due to oil depletion, Iranian oil exports will decline by 50-100% over the next 5 years, causing economic stress and social unrest. As a result the current regime in Iran may collapse within 6-30 months. If the current regime in Iran collapses it will probably be replaced by a military dictatorship.

If Iran's oil exports are successfully sanctioned or Iran is devastated by a destructive NATO bombardment then the current regime in Iran may collapse within 3-9 months. If the current regime collapses it will probably be replaced by a military dictatorship.

Some of the key facts:

- 1-Energy Return on Invested (EROI) represents a key energy factor. The EROI of an energy source is how much energy is produced for a given investment of energy. For example in the 1939 US oil returned nearly 300 barrels of oil for every oil barrel's worth of energy consumed in the extraction process EROI 295:1^[1]. By 2007 US oil production EROI had fallen as low as 5:1 ^[2] and US corn ethanol production may only be producing about as much energy as is used in the production process EROI 1:1^[3].
- 2-Our modern globalised world depends on an essential supply of High Energy Return on Invested (EROI) fuel sources otherwise known as cheap energy.
- 3-The gross production of energy i.e. the total amount produced is not as important at the amount of cheap (High EROI) energy available. The minimum EROI required to maintain a modern civilisation may be 10:1^[4].
- 4-60-80% of the essential global cheap (high EROI) oil exporters on which modern civilisation depends are located in the OPEC Middle East and North Africa (MENA)
- 5-The recent war in Libya has reduced their oil exports by approximately 80%. This has left the Persian gulf as the worlds most important source of high EROI oil exports, in the process draining the OECD's strategic petroleum reserves and all but removed global spare oil production capacity. This represents a strategic disaster for NATO of epic proportions. With most of Libyan oil production offline and reserves drained they are far more vulnerable to disruption in oil supplies.
- 6-The only other major high EROI oil exporters are Russia and the FSU. Russia and the FSU are increasingly exporting their oil directly to China.
- 7-The US is far more energy import dependent than is commonly realised. Through a combination of petrodollar recycling and imports of manufactured goods and raw materials the US is critically dependent on the virtualised import of high EROI oil.
- 8-Because 60-80% of the essential global cheap (high EROI) oil exporters are sourced from the Persian gulf states, if any disruption were to occur to the high EROI oil essential oil exports from the Persian gulf states the US would quickly be devastated. As well as the US economy its domestic manufacturing and agriculture which depends on the high EROI oil would rapidly collapse.
- 9-This US vulnerability is hidden by the large domestic production flows of low EROI oil and gas in the US. Much as the bad housing loans in US only became apparent during the recession, so too the hidden energy vulnerability of the US will become apparent if high EROI oil exports are disrupted.
- 10-This is why the US and the OECD will not leave the Persian gulf. It is not a matter of imperialism, their very **survival** now depends on this vital source of

energy, whether directly as is the case for many European and Asian countries or indirectly as is the case for the US.

- 11-If the OECD quietly leaves the Persian gulf then Iran as the major regional power will become master of the world by default. Iran would be tempted to hold most of the worlds essential oil supply to ransom any time it felt that this was advantageous.
- 12-This is no trivial thing, high EROI oil is essential for industry and industrial agriculture. Without industrial agriculture only a fraction of the 7 billion people on the planet can exist. Any country that loses access to industrial agriculture would face social collapse and famine.
- 13-To ensure that Iran does not dominate the Persian gulf the OECD countries are putting maximum pressure on Iran.
- 14-There is great time pressure on the OECD because the effects of peak oil and peak net energy are rapidly degrading the OECDs economic and military capability. If the OECD does not act soon within a few years the balance of power will have forever shifted in favour of Iran. In the waiting game, due to the differential effects of peak oil, Iran wins by default.
- 15-As this article is written at the end of December 2011 the worlds attention is focused on Iran's threat to close the straights of Hormuz.
- 16-In reality the straights of Hormuz may be a side show. The western militaries are probably more than capable of clearing the straights of Hormuz. Although at its narrowest it is only wide enough for two supertankers to pass each other. A single tanker sunk sideways at this point may block Hormuz for months. Iran's navy and air force are unlikely to last long against NATO. Within a few hours NATO stealth weapons could quickly destroy a thousand targets inside Iran, including, oil, gas, petrochemical, power, industrial and transport infrastructure. Iran would be unable to detect, much less prevent such an attack.
- 17-In 1988 Iran tried unsuccessfully to close the straights of Hormuz. In the resultant and well documented operations US military easily dealt with the issue. Culminating in a US reprisal with operation preying mantis.
- 18-In the official version of history this is where the matter ended. The Iranian military was overcome and Iran capitulated in the face of overwhelmingly superior US military power.
- 19-However in the real world events did not quite unfold that way. When Iran's attempts to attack Kuwait's tankers failed, the Iranian response was to significantly escalate the situation by attacking Kuwait's oil installations directly with a combination of a cruise missile and scud missile attack. Although little actual damage was done both Kuwait and the US decided to end hostilities.
- 20-In 1988 Iran's missile capability was much more limited and unlike the present the world still had plenty of cheap (high EROI) oil.

- 21-Admittedly the government of the Islamic Republic of Iran is only a little over thirty years old so there is only a relatively short history to draw upon. Even so, whether it is the eight year long Iran Iraq war or the confrontations with the western powers Iran has tended to meet force with greater force, escalation with greater counter escalation. As this report is being written Iran has responded to escalating western hostility by engaging in war games and threatening to close the straights of Hormuz. Although Iran may have chosen the period between Christmas and the new year, when most traders are on holiday, so as not to alarm the oil and stock markets.
- 22-There is indirect evidence that western governments have become very frightened by the prospects of a war with Iran. The imaginary nuclear threat was hyped up in the media while the terrifying threat prospects of an oil apocalypse is either played down or censored.
- 23-With the worlds attention focused on Iran's threat to close the straights of Hormuz there is little discussion on the impact of an Iranian missile strike on the oil and gas facilities of the Persian gulf.
- 24-In August of 2011 a research paper addressing this very issue was published by MIT press^[5]. The main point being that Iran's existing missile forces were neither numerous nor accurate enough to pose a threat. As a result it was suggested that a US presence in the region was not required.
- 25-However there were several key assumption and omissions in the research. First that Iran would not be deploying cluster bomb warheads on its missiles. Something that Iran has been publicly known to have developed many years ago^[6]. More importantly the greatest unknown, is whether to defeat Anti Ballistic Missile (ABM) systems the warhead has been set to release its cluster bombs as soon as the missile enters a ballistic trajectory just twenty seconds into its three hundred second flight. Such a tactic would defeat all known and projected ABM systems. Given that such a concept is both well known and publicly discussed it would be surprising if it were not already implemented.
- 26-With early warhead release traditional accuracy improvement measures such as missile spin up degrade performance. This fact makes Iran's stockpile of relatively primitive short range missiles such as Scuds potentially very deadly. The early warhead release may scatter the one thousand cluster bombs over an approximately one thousand meter diameter footprint, therefore a two hundred meter circle of error probability is not as relevant.
- 27-The critical issue would then be the time required to repair and rebuild such facilities. One of the important targets discussed in the MIT research paper was the Saudi desulphurisation facilities which remove the poisonous and explosive hydrogen sulphide^[7] from sour oil. When hydrogen sulphide burns it can produce sulphur dioxide^[8] and sulphuric acid, both of which are corrosive. Imagine a

burning facility covered in sour oil, full of poisonous hydrogen sulphide and the whole place covered in sulphuric acid residue. Repair workers are forced to wear protective clothing in a hot desert.

- 28-Natural gas facilities filled with flammable and explosive gas are even more vulnerable. Any of the Liquefied Natural Gas (LNG) facilities in Qatar could easily be destroyed. These LNG facilities are like giant gun powder kegs, except LNG is much more unstable than gun powder and has much more explosive energy. It may take years to repair or replace such facilities. Consider that LNG facilities are so vulnerable that if instead of high explosives, a missile warhead simply filled with ball bearings travelling at hypersonic speeds may be sufficient to cause destruction.
- 29-It is therefore somewhat surprising that the UK, a country dependent on LNG from Qatar is taking such a hostile and provocative stance towards Iran.
- 30-Since an Iranian attack on Persian Gulf oil and gas facilities would be as destructive as a full scale global nuclear war the whole issue of Iran acquiring nuclear weapons may be irrelevant.
- 31-The western powers appear to be determined to provoke Iran by one means or another. This strategic approach is in some ways hard to understand. When dealing with North Korea the west and the world have adopted a policy of decreasing tensions given North Korea's current instability and possession of nuclear weapons.
- 32-As far as can be determined from anecdotal reports Iran is also currently undergoing a great deal of internal instability. This is not caused by civil unrest but instead by what appears to be a titanic internal power struggle.
- 33-In 2010 during the previous round of tension between the west and Iran, I travelled to Tehran to explain the growing pressures on the OECD and plead with Iranian officials not to carry out a doomsday attack on oil and gas facilities, as this could well end human civilisation and kill greater than 90% of the population of the world. I was reassured that Iran's government was responsible and would not act unprovoked.
- 34-Many of the senior officials that I personally met in 2010 have either lost power or have been imprisoned during Iran's internal power struggle.
- 35-At such a sensitive time for Iran the OECD has decided to pressure Iran instead of coming to an accommodation.
- 36-Over the last thirty years Iran has met every hostile escalation with an even greater escalation of its own. Iran's military has repeatedly publicly stated that if they suspected an attack on Iran they would act preemptively against the whole region.
- 37-There is a great deal of discussion regarding how Iran would **retaliate** if attacked. However Iran's military has always publicly stated their battle plan is a

preemptive launch on **suspicion**. The red line may not be an outright attack, for Iran's military the mere suspicion may be sufficient grounds for war.

- 38-Increasing tension with an aggressive Iran, already armed with a possible doomsday arsenal and a preemptive launch on suspicion battle plan may not have a happy ending.
- 39-It may be that NATO has found some as yet unknown technology to counter this threat or is hoping to use psychological warfare to prevent its use, or perhaps NATO war planners are just hoping for some kind of "luck". We suspect they may be disappointed.
- 40-It has been suggested that war would be good for the western military industrial complex/bankers/powers that be, however given the scale of the resulting collapse in energy and food supplies this would appear to be unlikely.
- 41-The collapse would likely be counterintuitive in its speed and extent. A gradual population decline of 80-97% taking 20-50 years. It would manifest as a grinding EROI collapse. Too fast to reverse to slow to escape by hiding in a bunker. Those in power would find themselves stripped of power then along with their families hunted down and killed much as some middle eastern and north African leaders have been.
- 42-To put the scale of the EROI problem in perspective consider that even if "the powers that be" had decided to remove 60-80% of the excess population in the OECD countries by airburst detonating clean burning thermo nuclear bombs against their own cities while hiding in bunkers, this would still be inadequate for the task. The end result would still be the same total catastrophic civilisation wide collapse and their own deaths.
- 43-As far as it is possible to calculate the only viable remedy is to use the EROI boosting techniques we are currently researching. One thing is very obvious, even with global cooperation it will be a very close thing and not without considerable pain, and it is almost certainly impossible if anything were to happen to the high EROI energy in the persian gulf.
- 44-Amazingly not only does the OECD not appear to have a plan B there does not even appear to be a plan A.
- 45-If you come across a man covered in petrol playing with matches you can guess one of two things either he does not understand what he is doing or he has some psychological issues.
- 46-Given the stakes and the attitude of some of the actors the world may now be in more danger than at the height of the Cuban missile crisis.
- 47-Like two men standing knee deep in petrol playing with matches, in the aftermath it won't matter who started it.

- 48-I do not know if those in power in the west have a secret master plan for dealing with Iran, but I sure hope they know what they are doing, otherwise their time in power may soon be cut short.
- 49-CGSA is working on research designed to mitigate the worst effects of an emerging economic, geopolitical, energy and food crisis due to the decline in availability of cheap energy. For the second time in two years we have had to put on hold our primary research effort to address more immediate concerns with geopolitical tensions.

Conclusion:

Energy depletion and EROI decline is causing global economic stress, wars and civil unrest. The structure of modern society is dependent on cheap (high EROI) energy and resources. Without new specialised technological infrastructure and processes to reverse this trend, global collapse is inevitable within the next 5-10 years.

There are two immediate related dangers. First a stressed and dying OECD and [Persian] Gulf Cooperation Council ([P]GCC) pressuring or attacking Iran which provokes an Iranian response. Second a threatened and cornered Iran destroying the oil and gas facilities of the Persian gulf thereby destroying human civilisation.

Recommendation:

The primary challenge is to reduce then reverse the rate of EROI decline. If this challenge is not dealt with all parties risk total collapse over the next few years.

Iran and the OECD/GCC must quickly come to an accommodation. This will allow all parties to concentrate on dealing with the primary challenge.

To provide a short report concepts have been greatly simplified. In addition a detailed analysis of energy depletion along with the rapidly worsening food and water security challenges of the [P]GCC and its geopolitical implications have been omitted.

Due to the sensitive nature of this topic some information has been omitted.

¹ Megan C. Guilford, Charles A.S. Hall, Pete O' Connor and Cutler J. Cleveland, A New Long Term Assessment of Energy Return on Investment (EROI) for U.S. Oil and Gas Discovery and Production. Sustainability 2011, 3, 1874. accessed December 2011, <http://www.mdpi.com/2071-1050/3/10/1866/pdf>

² Ibid

³ David J. Murphy Charles A. S. Hall Bobby Powers. New perspectives on the energy return on (energy) investment (EROI) of corn ethanol. Environ Dev Sustain (2011) 13:179

⁴ Charles A. S. Hall, Stephen Balogh and David J. R. Murphy. What is the Minimum EROI that a Sustainable Society Must Have?. Energies 2009, 2, 45. Accessed December 2011, <http://www.mdpi.com/1996-1073/2/1/25/pdf>

⁵ Joshua R. Itzkowitz Shifrinson and Miranda Priebe. A Crude Threat The Limits of an Iranian Missile Campaign against Saudi Arabian Oil. International Security, Vol. 36, No. 1 (Summer 2011), pp. 167–201

⁶ "Sharab missiles, carrying cluster warheads, with a range of 2,000 kilometers (1,200 miles), were fired from the desert near Qom.", Federation Of American Scientists, Shahab-3, Accessed December 2011, <http://www.fas.org/programs/ssp/man/militarysumfolder/shahab-3.html>

⁷ Wikipedia. Hydrogen sulfide. Accessed December 2011, http://en.wikipedia.org/wiki/Hydrogen_sulfide

⁸ Wikipedia. sulphur dioxide. Accessed December 2011, http://en.wikipedia.org/wiki/Sulfur_dioxide