



Balance of Power for the Powerless

The *casus belli* for the War on Iraq poses perplexing problems for markets and for American foreign policy. For markets, the issue is whether **volatility is about to increase or decrease**. For investors it is a question of how they should respond to the market's current domination by geopolitics. On the foreign policy front, a widening breach in an old alliance threatens to have lasting implications for the War on Terrorism. The War on Iraq is shifting the old foreign policy paradigm that governed international relations for more than 60 years. How the war is fought, and perhaps, even more, how the postwar unfolds is likely to dominate the next decades of the 21st Century. What **9-11** proved was that U.S. was vulnerable for the first time since 1941 and the mainland U.S. for the first time since 1812. Further, the U.S. is vulnerable to non-state groups as well as States. States can offset American military and economic dominance by an asymmetric deployment of relatively low levels of power. Non-state groups can inflict serious damage while hiding in someone else's territory. Finding them and doing something about them requires State cooperation that may or may not be forthcoming. If it is not, then the U.S. is forced into a State-to-State conflict. What has changed the dynamics of such conflicts is the relative abundance of weapons of mass destruction that can be obtained relatively cheaply and deployed by both State and non-state actors. Small States players can now achieve a significant deterrent counterweight to U.S. power by **raising the cost of deploying American Power. For this reason, a new Balance of Power is emerging. WMD makes the otherwise powerless capable of blocking U.S. power or making its deployment exceedingly costly. This development has already changed the international politics of the 21st century. As weapons become cheaper and more deadly, the dynamics of power will change even more.**

Consider the logic of the Bush Administration case for the forcible disarming of Iraq. Initially, it was framed as part of the War on Terrorism. That appears to have been a tactical error whose consequences are now legion as the American case for attack has failed miserably. While terrorism could enter into the equation, clearly the real issue for the Bush Administration was **nuclear proliferation. Nuclear proliferation is** an issue only indirectly connected with the issue of Terrorism. While Terrorists could be deployed as a mechanism of delivery of WMD, but the nuclear proliferation issue is foremost one of international politics. While the terrorists may be the soldiers, they are not the generals. The deeper issue at stake in Washington is whether **nuclear proliferation can be stopped or even be limited and controlled?** While this issue has been around for many years, **9-11** has sensitized America to its own vulnerability and therefore has made the proliferation more timely. **What could happen has become more important than what has happened.** While nuclear proliferation dominates Administration thinking, it has left America's erstwhile allies around the world largely unmoved. Why don't they see the threat? Moreover, why is this dynamic not a threat for them? More importantly, some 'allies' may see an advantage in the new American dilemma.

The Afghan war drew some support from other NATO countries, yet many NATO members do not see Iraq as an important milestone for stopping potential nuclear proliferation. Nor are they convinced that other WMD pose a direct threat to them or their policies. The Administration's focus on the linkage between WMD and Terrorism has fallen on its face. Trying to link these problems together has caused considerable ill will toward Americans, and it may explain this lack of cooperation. **However, powerful European countries may have serious political objectives that are served by denying the U.S. much needed support.** Clearly, many of them resent the overwhelming military and economic capabilities of the United States, although their own geopolitics are often cloaked in humanitarian garb.

While the Administration has embarked on a course that could fracture the alliance, it takes two to tango. France and Germany have taken opposite, but equally alliance-shattering steps. This is a striking change that has set members of the alliance on a collision course. Without cooperation, particularly at the intelligence



gathering level, it is not possible to successfully hem in well-armed and well-financed terrorists. Surely the Administration must have realized that its ability to demonstrate a convincing Iraqi linkage to terrorism was weak. Why, then, was the case for War on Iraq mooted on this more tenuous linkage? What might be the real reason for the U.S. to choose the military option? It surely can't be to keep oil prices moderate.¹

In our opinion, the real answer is that the U.S. fears that both terrorist and relatively weaker States can use asymmetric techniques to breach our formerly vaunted security. At the same time, our erstwhile allies, can now become far more important than their sheer military and economic power would allow by forcing the U.S. to concede them latitude inside a coalition. That may reveal why our government seems so inept and it may explain why the Coalition of the Unwilling is so large. Poor presentation has weakened the U.S. case, but even if the U.S. case were presented well, a U.S. policy success would still be resented by many NATO allies. Since it appears that the France and Germany are sparing no effort to lead the alliance away from the U.S. position, one should ask why their perception of risk regarding Iraq is so different? **The answer is that world resentment has a single focal point: massive U.S. power that seems to be out of control. It is not the notion of 'preventative war,' nearly as much as it is that the U.S. has the capability to define for itself when and where it will choose this method of righting geopolitical discontents.**

The proliferation of nuclear weapons, as well as the other devices of mass destruction creates a single common denominator in the threat assessment that faces U.S. policy planners. What links Iran, Iraq and Korea is continued nuclear weapons development. It is the one consistent theme in the thought pattern of Administration policy planners. America's dominance at the end of the Cold War (the so-called Unipolar Moment) has generated its own reaction among both allies and opponents. Whether one looks at the Middle East or the Far East, one sees a growing attempt to "rebalance" power against the single superpower. There is no longer a simple coincidence of perceived risk that the Cold War once provided. As a result, a tectonic shift in American foreign policy is now underway. Once the Genie is out of the jug, it will be very hard to put him back!

We think that 9-11 permanently altered the traditional American view of the safety of America.

Europeans have not known safety in more than 100 years. Accordingly, they may be more sanguine about the risks of terrorism within their own borders. For Americans, however, 9-11 was a watershed event. America appears vulnerable, no longer secure and no longer immune to terror. The "Axis of Evil" was a compelling phrase but 9-11 provided the real driver for changing American thinking about security. This Administration seems prepared to take big risks to enhance American security, and it is unwilling to wait as the current tedium of endless debate goes on at the United Nations. Its allies are not prepared to take the risks entailed by this new dynamic, and in fact, they appear to want to contest American power by not supporting the War on Iraq precisely because it is "preventive" in nature.

Some see the willingness to call upon a military option with few allies pure American hubris. Certainly, hubris can be the result of overwhelming American military and economic power. Certainly, it is true that the style of this Administration is to place high reliance on America's military capability and exclude power sharing with allies. Moreover, the U.S. has a much greater willingness to use that power to deal with countries or "movements," even without allies, a slant virtually unheard of prior to 9-11. This is creating a monumental response on the foreign political conduct of other nation states. Their response is also asymmetric. They are 'standing down' while America calls for support. Alliances can not takes such stress. First steps are followed by second steps, etc., until the foundation of the Alliance is crushed. The U.S. must see the current pitch as a

¹ See Nobel Laureate Gary Becker's cogent piece in the current issue of Business Week



continuing game, not a finite or one stage game. Hubris, notwithstanding, the U.S. appears to be blind to the 'continuing game' characteristics of a multi-state world in the 21st century with a very unequal distribution of power. The devil is in the details over how to end the menace that has emerged in Baghdad, but the risks increase by forcing the game to be played by an arbitrary clock.

The threats to American safety that can arise from Nuclear Proliferation are far more powerful than the alleged, terrorist connection between Iraq and the minions of Osama bin Laden. Clearly, 9-11 was catastrophic in its impact on the political psyche of this Administration. It focused attention on What Could rather than What Is, and in the logic of the argument, the attack produced a growing awareness of the growing threat posed by nuclear proliferation. Time might be the diplomat's best weapon, but Time is a threat when the U.S. is dealing with state-supported attempts to get into the ultimate terror business. Paradoxically, the shift in policy clearly seems to serve this Administration's intent to draw a sharp line of demarcation between itself and that of its predecessor. The willingness to 'do the right thing' contrasts with an evident feckless use of American power during the Clinton administration. The 'facts' were known to both Administrations. This one has chosen to do something else. The nature of the problem has really not changed, but the emphasis on uni-polar solutions has. Most of the facts of the growing menace represented by Saddam Hussein were known in the Clinton Administration, but it was not willing to act. Off course, the tail that wagged the dog from 1998 onward, sporadic though the wagging was.

Admittedly, there is a political **leitmotif** being served in the attempt to decapitate the regime of Saddam Hussein. This Administration sees it as a necessary first step to finding solutions in the Middle East. The absence of democratic states and market economies in the region is seen to lie at the root of the Middle East's dilemma, just as much as the failure to find a coherent path through the Israeli-Palestinian war. 'Getting rid of Saddam' certainly could explain the strong preference this administration has for restructuring the Middle East. What is not explained is how War Now furthers this more complex and arduous goal of restructuring the Middle East.

Furthermore, getting rid of Saddam cannot explain the strategic shift in U.S. policy in Asia. War in Iraq surely weakens the ability of the U.S. to dampen the probabilities of a collision in North Korea, a contradiction noted by the Administration's many critics. To find any coherence in these policy divergences, one has to reach beyond facile explanations. The fear of nuclear proliferation and the difficulties of constructing a worldwide strategy to confront that threat are probably far more important than is now admitted, even by the Administration.

In our view, the attached piece from today's Washington Post on Iran's growing nuclear potential amplifies the true motivation for Administration policy: namely, the necessity of doing something striking and decisive about unwanted nuclear proliferation. It is as if the Administration feels that America is living on borrowed time---with the clock running at an undetermined pace since the tragedy of 9-11. Do something now has become more pressing than constructing a larger Coalition of the Willing.

Living on borrowed time must have worried planners in the early days of the Afghan war, because maintaining Pakistan's control over its own nuclear arsenal became a kind of meta-objective for this Administration. Similarly, North Korea's real threat was its undermining of the U.S. stance on nuclear proliferation in Asia. For the Administration, nuclear proliferation has become the dominant strategic issue for the U.S. in the 21st century, and 9-11 underscores the fundamental weakness of America and the globalized world in the face of that threat. Our world works on transparency, rapid and unobstructed movement of goods, people and ideas. An open environment is 'high growth nutrient' for terrorism that is hooked to a Messianic vision to re-order the world. The Bush Administration rhetoric over 'evil doers' pales in comparison to the bin Laden utterances of the past few years, but it provides a subtext for a move to change the speed of address to the proliferation issue. What has been confusing therefore is why the Administration did not moot nuclear proliferation as its



central objective when it brought the issue of Iraq to the U.N? No doubt, because the problem has been around for a long time and a single regime decapitation could not solve it. But continuation of this confrontation policy is now terrifying much of the world.

Perhaps, the connection to Terrorism was only a tactical response? If so, it was a poor choice of tactics in light of the resistance to U.S. claims of a connection between Saddam Hussein and various "Terrorist Organizations." As for international law, the famous saw that 'a hard case makes for bad law,' applies. A willingness to act without the strong support of other nations is a huge risk. Without question, the current Iraqi regime is reprehensible. Further, what little movement there has been to address WMD in Iraq has been solely the result of the exercise of U.S. and British military muscle, not the rant of French logic! Using overwhelming military force to bring down the Baghdad regime, however, represents a fundamental change in American foreign policy. What troubles the rest of the world, even if it has no real love for the Iraqi government, is the "imminence of threat" coupled to the realization that only the U.S. is sufficiently powerful to deal with it on its own. Facts on the ground or on the sea count far more than nuanced debate in a powerless international organization.

Imminence of threat has become the fulcrum for the foundering U.S. case in the court of public opinion. The public, including the various nation states that populate the Security Council debating society, cannot get its hands around the imminence issue. That would require a larger revelation of American intelligence information already suspect because of the doubts over how intelligence is gathered, assembled and verified. Surely, the 'smart money' in the Administration knows that. Thus, the question of understanding what could the Administration really be worried about becomes urgent. The Administration does not say that Iraq has Nukes, but it must be clearly thinking about what the costs will be when Iraq possesses such an ultimate weapon.

Consider the striking progress that Iran has made in becoming its own supplier of fissile material? And consider how the North Koreans threaten to alter the geopolitics of East Asia with a deliverable nuclear weapon? Not a pretty picture and surely a fearful one for an Administration that recognizes the conflicting objectives of its erstwhile allies, France and Germany.

The nuclear option connects asymmetric policy response from hostile regimes to the vulnerability of American life revealed by 9-11. The vulnerability stems from our openness. During what was clearly a very successful campaign in Afghanistan, despite the many critics in the beginning, nuclear proliferation got considerable attention because of the issue of Pakistan's regime stability. There was real fear that an overthrow of Musharraf in Pakistan (and replacement by a radical Muslim leadership) could have led to access to an already developed, deliverable nuclear technology by States as well as terrorist groups. Iran and North Korea have raised the stakes further and tocsin of war has now been rung even at huge cost to the future foreign policy of the United States. Nuclear proliferation means that the cost of applying a tough U.S. policy to the world's trouble spots will have significantly expanded.

To us, that is the real message to be drawn from this Administration's willingness to take the risk of shattering many, widely held nostrums of America's old alliance structure. To get the rest of the world on board would mean that far more intelligence must be released as to the extent of Iraqi progress in obtaining a real nuclear threat. Once so-armed, Iraq could raise the stakes sufficiently to dampen U.S. moves designed to confront any future Iraqi moves in the Middle East. One could easily say that a nuclear Iraq would raise the stakes monumentally.

Ken Pollack, author of **The Threatening Storm** speaks about Saddam's use of nukes as an offensive weapon. By threatening their use, he raises the stakes so significantly as to potentially deter any U.S. counter-threat. Chemical and biological weapons can be countered albeit at heightened costs, and these weapons have the



downside of causing perhaps even more damage to the home troops and population. Nukes are qualitatively different and could make the U.S. pause simply by the sheer scale of the damages they can do to an entire region, let alone spreading the damage world-wide. What about the U.S. counter-threat? Mutually assured destruction worked in the Cold War primarily because at some deep, fundamental level, the Russians had a lot of skin in the game. They didn't want to see what they had painfully built over some 73 years simply obliterated, even if the U.S. would itself be destroyed. Evil though they were, they were prudent evildoers. Ultimately they found they could not compete in both lethality and economics. That was a rational assessment. That is missing in Iraq.

A terrorist group that has a messianic vision of the world to come, once connected to nukes, is frightening beyond compare. It creates unpredictability and a potentially huge cost for any nation to surmount, even a superpower like the U.S. The Bush Administration refuses to accept this constraint. The U.S. is saying to the world, "if not now, when," but the rest of the world wants to balance out U.S. power. Few nations see themselves as targets and U.S. policy is creating its own asymmetric response even among former allies. The rest of the world may be blind to the real threat, but blindness is something we have seen before in world history. The divergence in objective killed containment of Iraq as a policy in the 1990's. The French and Germans know that, and divisions in the old alliance structure can only goad terrorists to see that they, indeed, can have a significant effect at the highest levels of policy formation.

The U.S. objective of restraining nuclear proliferation is highly laudable. Indeed, that threat is quite credible. The problem is that U.S. superpower supremacy has created an enormous backlash and has put this Administration's resolve to test. A truly rational player would consider this as a continuing 'game,' and ask, what's next even if Saddam is eliminated? That is where real fear begins. That was the name of the game in the late 1930's, but the public believed "Peace In Our Time," rather than the threats from the Rhine. Now the Rhine connects two former adversaries who share a common objective: to parry U.S. power. The irony is that asymmetry in geopolitics has created power for the powerless! That is what the U.S. is trying to prevent by its war on Iraq. And, it has to hope that the lesson taught in Iraq will be learned in Tehran and Pyongyang.

Iran's Nuclear Program Speeds Ahead (The Washington Post)

'Startling' Progress at Complex Poses Challenge to Bush Administration at Delicate Time

By Joby Warrick and Glenn Kessler Washington Post Staff Writers Monday, March 10, 2003.

Near the town of Natanz in central Iran, 160 newly minted centrifuges stand in neat rows inside a nuclear complex that the United States and other countries were surprised to learn about only seven months ago. The machines have been tested and judged fully operational, senior Bush administration officials say. Sometime this year they will begin spinning hot uranium gas into nuclear fuel.

In a nearby building, workers are assembling parts for 1,000 more centrifuges, part of a constellation of 5,000 machines that will be linked together in a vast uranium enrichment plant now under construction. When the project is completed in 2005, Iran will be capable of producing enough enriched uranium for several nuclear bombs each year.

Details about the Natanz complex are beginning to trickle out following the first visit to the site by officials from the United Nations late last month. U.S. officials who were briefed on the visit described Iran's progress last week as "startling" and "eye-opening," so much so that intelligence agencies are being forced to dramatically shorten estimates for when Iran may acquire nuclear weapons.



ECOMENTARY™

But equally striking is the extent to which Iran's breakthrough caught the United States and others by surprise. For a decade, U.S. efforts to keep nuclear weapons away from Iran focused on a location far to the south, a nuclear power plant being built with Russian help near the port city of Bushehr. Fearing that Iran would extract plutonium from the reactor's fuel for a nuclear weapon, U.S. officials have imposed sanctions against Russian companies and exerted enormous pressure on Russia, China and Ukraine to prevent them from supplying the project with sensitive equipment and know-how.

All along, the Tehran government was quietly pursuing a different course, U.S. officials now say. While not foreclosing the possibility of plutonium-based bombs, they report, Iran built a clandestine and highly sophisticated nuclear infrastructure that would allow it to seek uranium-based weapons.

The Natanz plant poses a critical challenge to the Bush administration at a delicate time -- just as North Korea also appears to be intensifying its efforts to build a nuclear weapon, and on the eve of a possible war with Iraq. The disclosures will raise difficult new questions about U.S. policy and the president's declared intention to preempt threats from those who seek to acquire weapons of mass destruction.

A Secret No Longer

The pilot uranium enrichment plant at Natanz, 200 miles south of Tehran, came to light only last August, when it was exposed by an opposition group, the National Council of Resistance of Iran. While the group has been labeled by the State Department as part of a foreign terrorist organization -- the Mujahedin-e Khalq, based in Iraq -- it has often disclosed reliable information about Iran's efforts to obtain weapons of mass destruction. U.S. officials consider much of its information on the Iranian projects to be credible.

Iran already has much of the other knowledge and technology needed to become a nuclear weapons state, U.S. officials and outside experts say. Iran possesses an arsenal of medium-range ballistic missiles as well as the factories and engineers to produce new ones. It also has chemical and possibly biological weapons, according to the CIA.

"Here we suddenly discover that Iran is much further along, with a far more robust nuclear weapons development program than anyone said it had," Secretary of State Colin L. Powell said yesterday on CNN's "Late Edition." "It shows you how a determined nation that has the intent to develop a nuclear weapon can keep that development process secret from inspectors and outsiders, if they really are determined to do it."

"This," said another senior administration official, "is a country going full-bore on all aspects of the nuclear fuel cycle."

While U.S. intelligence agencies have long believed Iran was seeking a nuclear weapon, the Natanz disclosure suggests the Iranians have gone further than was previously suspected.

Iran denies having such ambitions. Iranian President Mohammad Khatami, speaking on the eve of last month's visit by the United Nations' International Atomic Energy Agency, acknowledged an ambitious nuclear power agenda, but said Iran's only interest was diversifying its energy supply for a growing population of 65 million.

As a signatory to the Non-Proliferation Treaty in good standing with the IAEA, Iran has a right to pursue nuclear technology for peaceful purposes, subject to the agency's oversight. That right includes producing its own enriched uranium. Technically, Iran was not obligated to disclose its Natanz plant to the IAEA until it began processing uranium, although Khatami pledged to give advance notice of new construction in the future.



Iran's assurances about its intentions have drawn skepticism elsewhere. Why, weapons experts ask, would a country that sits atop one of the world's largest reserves of oil and natural gas spend hundreds of millions of dollars to build nuclear power plants?

"Whether there is an economic rationale doesn't matter: This still will bring Iran within weeks of getting a large arsenal of bombs," said Henry Sokolski, a Defense Department official during the first Bush administration who served as an adviser on nonproliferation policy. "And they can do it without breaking any rules."

Iran's acknowledgment of its uranium enrichment program last month signaled a shift in the country's nuclear strategy, one that complicates the U.S. response. As long as Iran adheres to IAEA safeguards, a weapons program would be proscribed. But possessing a large amount of enriched uranium would give Iran the option of quickly launching a full-scale weapons program at a time of its choosing, either clandestinely or by renouncing its treaty obligations.

"By deciding to become transparent, Iran reduces its isolation and makes it harder for the United States or anyone else to say no to its enrichment plant," said David Albright, president of the Institute for Science and International Security, a Washington-based research organization. "At the same time it shows the world it is very close to nuclear weapons."

Advanced Infrastructure

Since the mid-1980s, Iran has made no secret of its quest for uranium enrichment. Many specialists have said Iran's final hurdle in building a bomb would be obtaining fissile material such as enriched uranium.

In December, the first satellite images of the activity in Natanz, released by the Institute for Science and International Security, appeared to verify claims by the Iranian opposition group of a large uranium enrichment plant under construction in Iran's desert interior. Why Iran would need such a plant was uncertain, as Russia had agreed to supply all the nuclear fuel needs for Bushehr, Iran's only known nuclear power reactor, which is still under construction.

The satellite photos gave little hint of what IAEA Director General Mohamed ElBaradei found at the site on Feb. 21 in the first visit by the U.N.-chartered nuclear monitoring agency.

ElBaradei discovered in one building a fully operational pilot plant equipped with the 160 gas centrifuges for enriching uranium, according to knowledgeable U.S. officials and weapons experts. An assembly room nearby contained the parts for 1,000 additional machines, about a fifth of the total number of centrifuges expected to be installed at the site. Depending on the capacities of the machines, 5,000 centrifuges could theoretically produce enough enriched uranium for at least two nuclear bombs per year.

Iran also acknowledged to the IAEA the construction of a plant to convert uranium into UF₆ (uranium hexafluoride), the gaseous form of the metal that is used in centrifuges, the officials said. Some UF₆ gas had already been imported by Iran from a foreign source, and some weapons experts suspect Iran enriched small amounts of uranium in a research facility elsewhere in the country. Any previous enrichment of uranium would constitute a violation of Iran's agreements under the Non-Proliferation Treaty.

It is not known precisely where Iran obtained the blueprints and the many specialized materials used to make centrifuges. Although some U.S. officials suspect Pakistan provided designs for the centrifuges in the early 1990s, the machines on display at Natanz had been significantly modified by Iranian engineers and could not be easily traced to a single country or supplier, according to U.S. and independent nuclear experts. Iran



apparently acquired centrifuge motors and other parts from abroad, and it recruited foreign scientists to help master complex engineering feats, the experts said.

"The bottleneck is getting the technology -- knowing how to build machines," said Gary Samore, senior fellow at the International Institute for Strategic Studies in London. "Once a country has the technology, it's pretty hard to keep them from getting the bits and pieces.

Pointing Fingers

The National Council of Resistance of Iran, the opposition group that first reported the nuclear complex at Natanz, said that Iran continues to receive assistance from China and North Korea, among other countries. Council spokesman Alireza Jafarzadeh said Iranian officials had visited both countries in the past two years to seek technical help with uranium enrichment. More recently, two Chinese officials visited Iran to oversee mining of uranium ore near the town of Yaz, the group asserted. The report could not be independently verified.

Jafarzadeh said Western policies were partly to blame for the failure to detect Iran's secret programs and deter or eliminate them. He said U.S. and European administrations should have adopted a more forceful posture rather than seeking rapprochement with more moderate Iranian leaders, such as Khatami, whose leadership coincided with a dramatic acceleration of Iran's nuclear program.

"We warned repeatedly that if the international community would not take immediate and decisive measures, the regime could reach the point of no return with their nuclear weapons program," Jafarzadeh said. "They might well be very close to that."

But Rose Gottemoeller, a senior Energy Department official under former president Bill Clinton, said the emerging crisis over Iran was hardly due to U.S. inattention. The past three U.S. administrations were "hugely concerned" that Iran was secretly developing new capabilities, and had achieved major successes in blocking known attempts by Iran to acquire nuclear technology from Russia and China.

The Clinton administration had lobbied Russia for years to stop assisting Iran, working through a joint commission chaired by Vice President Al Gore and Russian Prime Minister Viktor Chernomyrdin. Russia at one point suspended plans to sell laser separation technology to Iran after protests from the United States. U.S. officials feared that it would be used to help Iraq enrich uranium.

Gottemoeller, now a senior associate with the Carnegie Endowment for International Peace, acknowledged that previous U.S. efforts "focused too much on the Russian connection and not enough on our relations with Iran."

Gottemoeller said the arguments for direct diplomacy were even more compelling now, if Iran is to be dissuaded from turning its new nuclear assets into weapons. North Korea recently expelled the IAEA and is pushing toward the construction of a nuclear weapon. President Bush has referred to Iran, Iraq and North Korea as an "axis of evil."

"Our three 'axis of evil' designees seem to have decided to push hard to provide themselves with weapons if they're going to be in the constant attention of the United States," Gottemoeller said. "We need a more proactive, positive way of engaging them first and then trying to shut these things down."



ECOMENTARY™

MAS031003

ECOMENTARY² is published for clients of **Munk Advisory Services, LLC**
955 Mt. Moro Road, Villanova, PA 19085. tel (610) 527 5368 fax (610) 527 5068
Reproduction or quotation by permission only.
Website www.ecomentary.com. Contact: munkb@ecomentary.com