

The Energy Crisis



Zero Fossil Fuels by 2050?

By Martin Armstrong

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Introduction



The very foundation for an oil crisis unfolding is now decisively in place. Aside from the lockdowns which have caused widespread shortages in virtually every sector from food to paint, the shortages are deliberate. They have intended to force energy prices high to stop consumption. This hair brain idea that we need to have ZERO CO2 and the entire problem is fossil fuels has led to this concerted effort to completely change the world economy by force. Gates has been funding politicians all over the world and has used his money to buy everyone and that includes the press.



Of course, it is a self-serving argument for to win this fictional battle against global warming/climate change, it requires a one-world government which the United Nations, World Health Organization (WHO), International Monetary Fund (IMF), World Bank, and the Bank of International Settlements (BIS) are all happy to provide on an unelected basis naturally.

Introduction



Gates told everybody from the start that we needed to vaccinate the entire world and that would eliminate COVID. He could not be that stupid for that only worked with Smallpox because that **ONLY** existed in the human population. These viruses that co-exist in animals can never be eradicated because they have an endless reservoir in which to mutate. That is why we cannot cure the flu or the common cold which is also a coronavirus. Gates deliberately lied to the people.

Then Gates admitted that he would not share the vaccines with third world countries. What he does is lobby both the United States and the European Union to buy his vaccines and they should donate them to the third world. That is by no means a philanthropist but a capitalist using scare tactics to see his product.



Gates has cleverly pulled off his global take over using health to scare people but has created a monopoly by funding every health organization imaginable. The conflicts of interest are staggering and certainly the Biden Administration will never fire their wonder-boy Dr. Antony Fauci nor investigate Gates. Anyone who thinks Gates is really a philanthropist should read US v Microsoft. His character has never changed.

Anyone who really expects that the world is going to return to normal thanks to the vaccines, will start to wake up in 2022.



Introduction



Even John Kerry said in his video for Schwab's Great Reset that we cannot return to normal because what previously existed did not work.¹ These lockdowns have been a strategic tactic to deliberately destroy employment and industries that they see as unfit for their new GREEN vision. In Britain, Boris Johnson saying he will provide free education to retain people for a new type of job while in the United States John Kerry told coal miners to learn how to work in a factory to make solar panels. These people not only look down upon the people as just economic slaves, they exhibit that they are really psychopaths for they lack any empathy for the people they claim to govern.

Now even the vaccinated can still get sick and die. They now say boosters are required because the vaccines are no longer effective after 8 months. Little by little the Big Pharm have struck a goldmine and are not about to let this go. This is not a one-time thing, but will require the booster shots at least once a year. This has opened the door to totalitarianism whereby like the Nazis, you will be denied the right to travel without a COVID Passport. The object is to prevent gatherings that might lead to civil unrest and the overthrow of their new found positions and power.

¹ <https://www.armstrongeconomics.com/world-news/wef/the-real-covid-agenda-nobody-will-expose/>

Introduction



Adewale "Wally" Adeyemo
(born May 20, 1981) in Nigeria
United States deputy Secretary of the Treasury

Deputy Treasury Secretary Wally Adeyemo appears to have told the truth without realizing this was not something the Biden Administration wanted to admit. He made a statement, as a matter of fact, that the real cause of America's supply chain issues is a deliberate policy of the Democratic agenda. He actually said:

"The reality is the only way we're going to get to a place where we work through this transition is if everyone in America and everyone around the world gets vaccinated."

Adeyemo admitted in an interview with ABC News that the Biden Administration has decisively intended to starve out all dissenters making them suffer for they are Republicans anyway. They are trying to divide the nation turning the vaccinated against the unvaccinated and they think this will win the day for them.

Adeyemo said that the Biden Administration has already provided *"the resources the American people need to make it to the other side."* Effectively, take the Gates vaccine or face the consequences. They are masking authoritarianism as utilitarianism. The vaccine has not been mandated at the federal level in the US, yet, but it is apparent that the government plans to make life as difficult as possible for those who do not obey. This is why Janet Yellen is saying inflation is "transitory."

Adeyemo added *"as part of the transition we are seeing higher prices for some of the things people have to buy... That's exactly why the president was focused in the American Rescue Plan in ensuring on getting stimulus into the hands of the American people, so they'd be able to buy the products they need."*

Introduction

Yes, the government expects us, the Great Unwashed, to be thankful for saving the planet but wiping out our freedoms and future. There is a reason people have recently nicknamed the president “bare shelves Biden,” with the hashtags #BareShelvesBiden and #EmptyShelvesJoe becoming a viral sensation.

Although the Biden Administration met with the Ports of Long Beach and Los Angeles, which handles 40% of the nation’s goods, the promise of a 24/7 operation has not yet occurred. There is no ETA for when the ports will begin 24/7 operations either. Some ships are allegedly waiting 12 days at anchor before reaching the dock, and over 60 vessels are idled in the San Pedro Bay at the moment. With one of the nation’s busiest shopping holidays approaching (Black Friday) followed by ongoing seasonal shopping, this matter is likely to turn ugly.

Port Officials say that the cause of the backup has been due to the strictly-enforced Covid restrictions also in Asia. The rise in demand for goods has been created also by the Just-In-Time inventory management so stores reduced inventory for it could be brought in at any time. The top items on backed-up ships include furniture, auto parts, and textiles in addition to food which is no longer viable to ship by sea.



Stockpiling food is now essential. But as for energy, you do not shut down the supply before you even have alternative energy in place. They realize to make alternative energies viable; they need to drive the price of fossil fuels much higher. In California, because of taxes. Gasoline prices have now increased nearly another 50% in California reaching almost \$6.00.

The infrastructure legislation included a pilot program to study and test the idea of the Democrats imposing a 10 cent per mile tax on your driving a car. That would add on average \$1,200 annually per car so a 2-car family would pay \$2,500 and then they want a forced 10% into a government pension scheme.



Introduction



While I personally did buy a BMW i8 which is an electric hybrid, that does not mean that abandoning all fossil fueled cars and trucks will ever be possible. General Motors did announce their decision to phase out gasoline vehicles is the latest in a major shift that will mean drastic new demands on electric utilities. General Motors has announced that it aims to stop selling new gasoline-powered cars and light trucks by 2035 and will pivot to battery-powered vehicles.

Meanwhile, California's governor has set a goal of phasing out sales of new combustion engines statewide in just 15 years. However, the California Energy Commission is also requiring new single-family homes to be equipped with circuits and panels that would allow them to be powered by all-electric appliances for heating, cooking and drying clothes. Some cities are banning the expansion or creation of gasoline stations. As a person who bought a home that was 100% powered only by electricity, a power outage and you can not only not cook, but the food in your refrigerator and freezer goes bad. Any home that is 100% electric has great risks.

For now, most electric car owners plug in their vehicles at home and charge overnight, though this can require installing equipment that can cost up to \$2,000. Biden has adopted Schwab's 2030 Agenda for he set a goal of building 500,000 new public chargers by 2030. But most cars can only drive 200 miles. They then require up to 2 hours to recharge.

CODES AND STANDARDS California city bans construction of new gas stations

Existing stations will not be allowed to add more pumps.

BY PETER FABRIG, CONTRIBUTING EDITOR | MARCH 10, 2021



Introduction

In Germany, the crisis is the energy shortage has the government issuing instruction booklets to aid citizens of how to cook during a power outage which they expect this winter. In Europe, the German government was against being reliant on Russia and the whole gas pipeline dispute. Because of the Japanese reactor crisis, Chancellor Merkel outlawed nuclear energy. Wind power has failed so the result is that now the Civil Protection Office has unveiled an ad campaign focusing on all aspects of crisis preparation!

The cookbook with the 50 recipes from the winners of the “Cooking without electricity” competition will be published on September 27 and is now also available in bookshops. The 50 best recipes that have now been selected offer breakfast ideas, soups and salads, main courses, snacks and desserts.

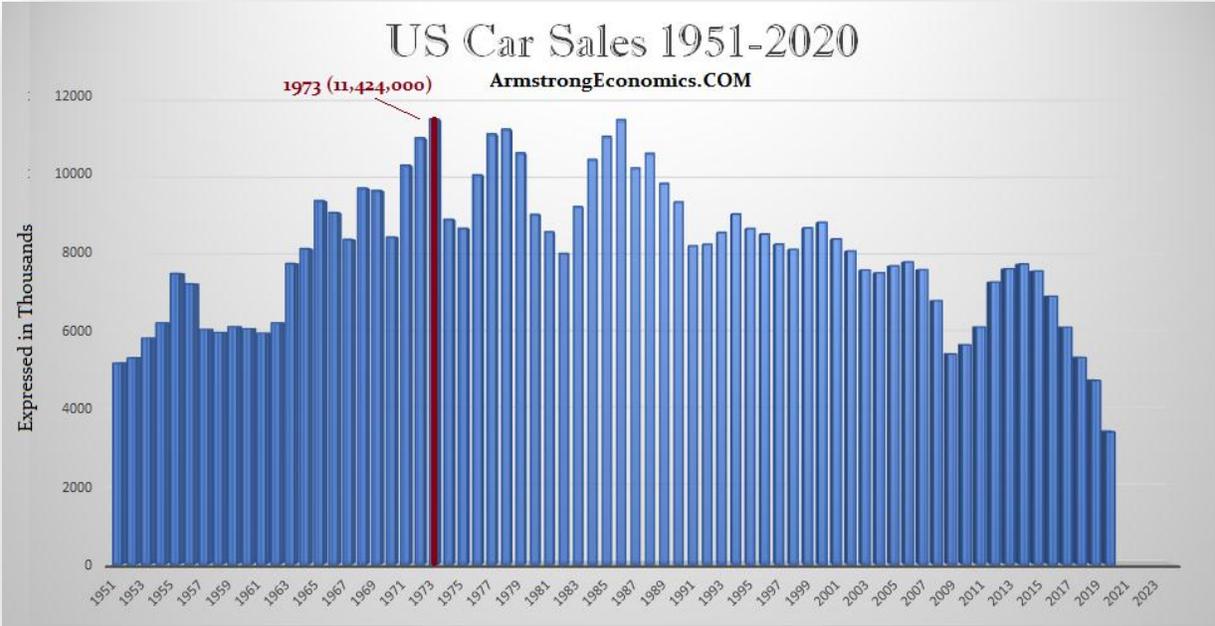


What all recipes have in common is that they use the BBK's stockpiling recommendations. In addition, experts from the participating organizations provide expert information on “Heat and heat in the event of a power failure”, say what to do “If no water comes out of the tap” or, as in the event of a power or water failure, “Nutrition for healthy infants, children and Young people” should be. The Bassermann publishing house, which belongs to the Penguin Random House Verlagsgruppe GmbH, has published the cookbook.

Germany is releasing a targeted strategy addressing “stockpiling, extreme weather, power failure and emergency baggage.” Then these government officials are releasing a new book entitled “Cooking Without Electricity.”² Without electricity the world can be sent into crisis. Even scanning in all the knowledge of humanity that existed in books if it's only stored electronically, that introduces the threat of losing all human historical knowledge and a return of the Stone Age.

² <https://www.bbk.bund.de/SharedDocs/Pressemitteilungen/DE/2021/09/pm-27-kochen-ohne-strom.html>

Introduction



United States Oil Consumption was reported at 17,177.648 Barrel/Day in Dec 2020. This was a decrease from the previous number of 19,475.375 Barrel/Day for Dec 2019. US Oil Consumption reached an all-time high of 20,531.482 Barrel/Day back in 2005 and a record low of 11,512.436 Barrel/Day in 1965. Oil production bottomed in 2008 and advanced for 11 years until 2019. The prospects of supply disruption will continue into 2022.

We can see that new car sales have fallen dramatically thanks to COVID. The all-time high remains that of 1973 and the trend may continue into 2025. Demand has only partially recovered since April 2020 but still ended the year approximately 9 million barrels per day (MMb/d) below the 2019 level, with continued COVID-19-related lockdown measures in many countries this has been keeping it around 6 MMb/d lower than January 2019.

The supply had remained strong until March/April 2020 and then dropped by 13 to 14 MMb/d in May, driven by OPEC+1 cuts and lockdowns. The market saw an oversupply of approximately 20 MMb/d in April 2020, pushing Brent prices to \$18 per barrel of oil for the month, before recovering to \$50 by the end of the year. OECD commercial inventories remained at very high levels by about 150,000 barrels above pre-COVID-19 levels.

Introduction



Meanwhile, many had hoped with the vaccines that oil demand would return to 2019 levels by late 2021 to early 2022. These expectations have proven to be unrealistic. Depending on the local and lockdown/vaccine restrictions have dampened the pace of GDP recovery globally. World GDP in constant terms per-capita, clearly peaked in 2019 and it appears prone to decline into 2023.

A new vaccine "tailored" to target probable future mutations of the COVID-19 will likely be needed by the middle of 2022, according to BioNTech's CEO, Uğur Şahin, who is Gates' buddy and co-developer with Pfizer. He has publicly stated that the Delta strain is far more contagious but insists that this can be addressed with mandating booster shots of current vaccines. Of course, this is a conflict of interest as he is preaching his own book and giving booster shots does not require more development even if the vaccine is ineffective against these strains. Clearly, since this is a virus with animal hosts, it will naturally mutate defeating their vaccine.

COVID-19 will certainly evolve and the next-generation virus will be exploited as has the current strain. The likelihood that this will become a permanent program annually is the dream of Pfizer BioNTech. Therefore, they expect that these vaccination programs will continue indefinitely but such mandates are wearing thin among the population. Their greed in demanding 100% inoculation and the loss of a job to refuse has relied upon the corruption of the courts in addition to the politicians.

The risk that Gates has introduced into this mix using his stake in Big Pharm to accelerate his wealth and control of society is starting to clash with the rising resistance. As they say, you can fool some of the people some of the time but never all of the people all of the time.



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AUDIO HUB SUBSCRIBE

Air travel down 60 per cent, as airline industry losses top \$370 billion: ICAO



Lowering Demand

The COVID Restrictions are really intended to reduce the demand for fossil fuels long-term. They are deliberately driving costs up with restrictions and curbing production in hopes of flattening demand curve. Airline traffic is off 60% and international travel will be only for the business traveler or wealthy.



EU Exempting Private Jets from Global Warming regulations & taxes

The EU is exempting private jets from Global Warming taxation. Since the elite all have private jets that they fly to Davos meetings, they should be exempt. What would the world be if everyone was really equal? Obviously, someone has to be in charge and make all the major

decisions. There were indeed 309 private jets that flew to Davos in 2019. While Schwab says we all must walk to work which is from our bedroom to another room in the house and cannot drive to work, they all can fly private jets to attend his global fest. It is just so hypocritical. Schwab, on the other hand, makes sure he is never photographed how he arrives in Singapore or other places.

Introduction

Schwab has been accused of using the pandemic to usher in a new era where the global elite retains total control over humanity. Exempting private jets seem to be merely a confirmation of that theory and is not so far off the mark. **John Kerry**, our Climate Czar, flies around in his private jet. He can't possibly be seen flying with the Great Unwashed or have to take his shoes off, be searched, or have to wear two masks to travel. Then the government pays for him to use his own private jet.

John Kerry as climate czar? Only Democrats could pick a guy with 6 houses, 12 cars, 2 yachts and a private jet, to tell you that YOU should take the bus to stop pollution.



Of course, much of the third world will not be able to abandon fossil fuels for decades to come. They have been the backbone of economic wealth in the Middle East in particular. But both Saudi Arabia and UAE have been making an effort to turn their economies away from oil production. Other countries would be impoverished and that would only result in military conflict throughout the entire Middle East.

The Biden Administration is out to stop US shale oil production as well as deep-water production all before there are sufficient alternative energy sources even if that is possible beyond theory. A turn in the climate too cold, which they are not even considering, would increase demand sharply for heat. The elderly will die quickly without heat and this would indeed reduce the life-expectancy rate.

While most of the offshore-oil-producing regions will be under pressure in an accelerated energy-transition scenario, the sector will still require new production of nearly 23 MMb/d to meet demand after 2030. This is just not being rationally considered by those pulling the strings of the Biden Administration, the United Nations, and including the leftist-anti-capitalists who work at the World Economic Forum.

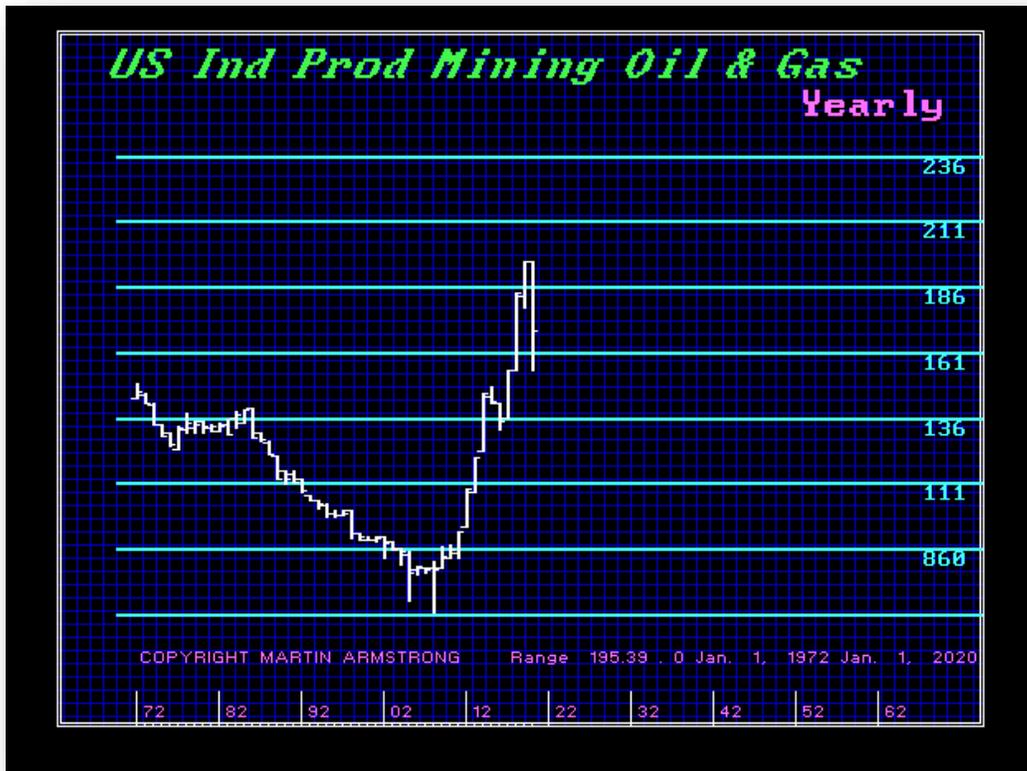
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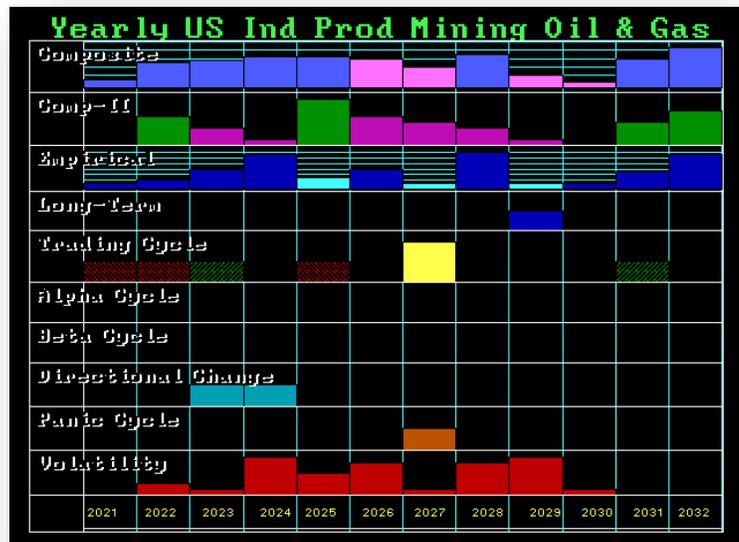
Meanwhile, the global supply chain was already showing stress since the Baltic Dry Index (BDI) bottomed in 2016 and the economy began to improve under Trump. The Index covers price levels for given shipping paths which is a composite of four sub-indices that measure different sizes of dry bulk carriers or merchant ships. The Baltic Dry Index is therefore an index of average prices paid for the transport of dry bulk materials across more than 20 routes. This tracks supply and demand for important materials used in manufacturing which include such items as coal and steel.

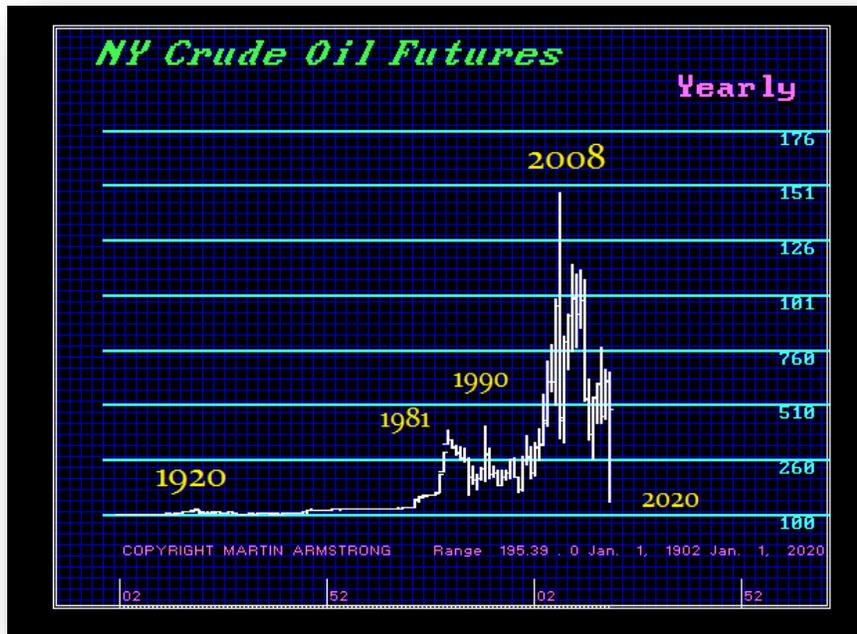
The decline from the highest yearly closing in 2007, was 8.6 years. Thus far we have 5 years up from the 2016 low and you can see that our Yearly Array had a Double Directional Change in 2021 and the volatility appears to be generally rising from 2021 into a high in 2029. But the turning points appear to be 2024 and 2027. The numerous Directional Changes indicate choppiness ahead but exceeding the 2021 high will confirm that we should expect an important high in 2024. A Yearly Closing above 4765 will signal that an uptrend is unfolding. By 2024, we see the initial target at 6231 and exceed that level before 2024 will then point to the next level being 12,150.

We had previously warned that by the beginning of 2022, global oil demand should be making new highs. Non-OPEC oil supply has fallen by over 2 mm barrels per day from its 2019 peak and non-OPEC oil supply growth will turn negative as we progress through this decade.

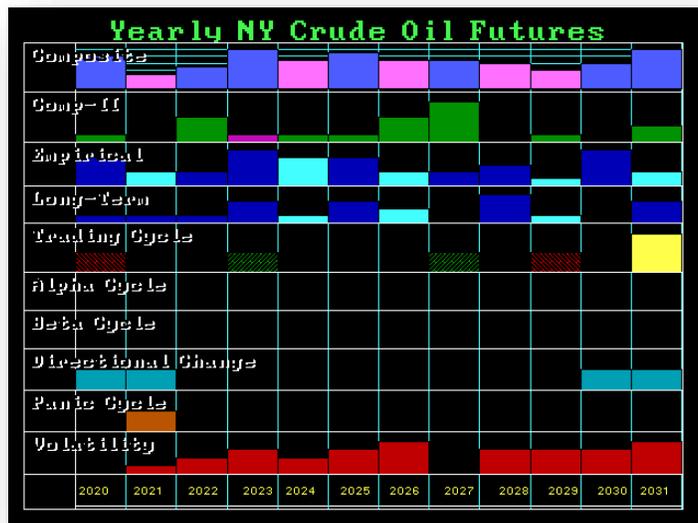


The Industrial Production Index on Mining, Quarrying, Oil and Gas, bottomed in 2008 and made a perfect 11-year bull market run peaking in 2019. The sharp collapse in 2020 was a serious technical decline which implies lower production which would typically be a 2 to 3-year reaction to retest support. That would point to a low in 2022. Note that we have back-to-back Directional Change targets in 2023 and 2024. The volatility will rise significantly post-2023 and it does not appear that we should be expecting new highs until after 2024.

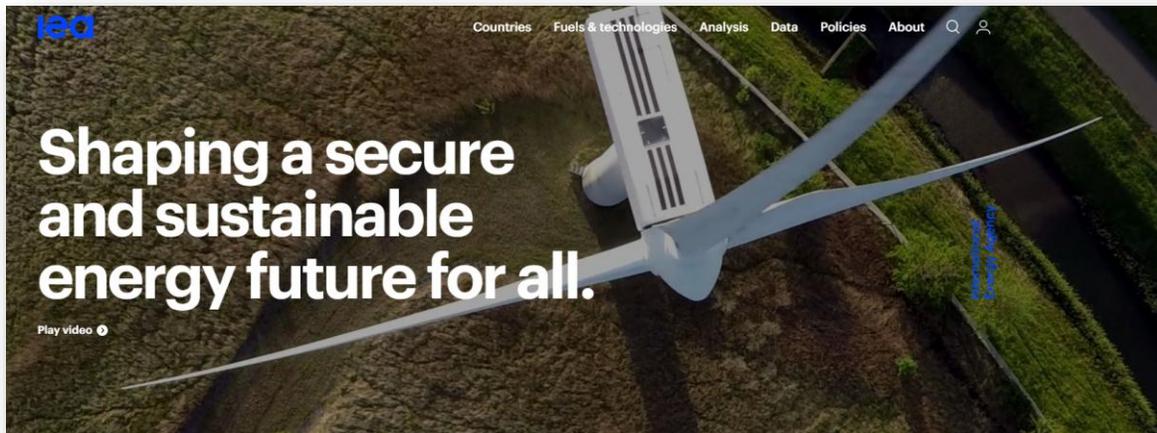




It would appear that we will see a structural gap between supply and demand in 2022 for demand has the potential to exceed world oil-pumping capability which would be the first time that has taken place in 160 years. The economic crisis that unfolds as the alternative dream of energy begins to cascade in upon the Climate Change movement. The decline in Crude Oil was a perfect 12-year Panic Low in 2020. A normal trend would project a price high at least \$115 with the mid-range target being \$175 and the outer projection \$225 by 2024.



The ramifications of what these Climate Change activists have done is really profound. The insane International Energy Agency's (IEA) goal of "Net Zero By 2050" which was reported on May 17th, 2021 added only more uncertainty long-term. Clearly, they will not even be an agency beyond 2032.



Nevertheless, reality is never a consideration. This IEA report aggressively has recommended that the global oil and gas industry must stop investing in their traditional upstream businesses. Instead, the IEA has recommended that capital should be redirected to other uses in the renewable energy projects and stop investing in oil product right now. Back in 2018, International Energy Agency (IEA) chief Fatih Birol: “The growth of US shale oil is strong and the pace is very high – the US will soon become the world’s largest oil producer.” On June 17th, 2021, we reported that in its latest Monthly Oil Report, the IEA called on OPEC+ to increase production in order to counter higher demand in 2022.³

The IEA was established by the industrialized nations to monitor and ensure the security of oil supplies following the OPEC Crisis of the 1973–1974. Preventing oil shocks was the reason they were created. In the May 17th paper, Dr. Fatih Birol reiterated the IEA’s primary purpose: “Since the IEA’s founding in 1974, one of its core missions has been to promote secure and affordable energy supply to foster economic growth.”

The IEA has been taken over by the climate change movement and it is no longer operating to secure the oil supply, but to terminate it. That original trust to encourage the oil supply for international security, has been abandoned.



³ <https://oilprice.com/Energy/Energy-General/Oil-Markets-Baffled-As-The-IEA-Calls-For-More-Production.html>

ENERGY

IEA alters oil demand forecast

GROWTH PATH

Response to trade tensions, slowing economy

NIDHI VERMA

NEW DELHI • The International Energy Agency (IEA) is reducing its 2019 oil demand forecast due to a slowing global economy amid a U.S.-China trade spat, its executive director said on Thursday.

The IEA is revising its 2019 global oil demand growth forecast to 1.1 million barrels per day (bpd) and may cut it again if the global economy and especially China shows further weakness, Fatih Birol said.

Last year, the IEA predicted that 2019 oil demand would grow by 1.5 million bpd but had cut the growth forecast to 1.2 million bpd in June this year.

"China is experiencing its slowest economic growth in the last three decades, so are some of the advanced economies ... if the global economy performs even poorer than we assume, then we may even look at our numbers once again in the next months to come," Birol told Reuters in an interview.

He said oil demand was hit by a trade war between the United States and China at a time when markets are awash with oil, due to rising U.S. shale production.

U.S. oil output was expected to grow by 1.8 million bpd in 2019, which would be slower than the 2.2 million bpd increase recorded in 2018, Birol said, adding "these volumes will come into a market where demand growth is coming down."

He said the IEA was concerned by rising Middle East tensions, particularly around the Strait of Hormuz, a vital shipping route linking Gulf oil producers to markets in Asia, Europe, North America and elsewhere.

Washington has said Iran was behind attacks on tank-

ers near the Strait in May and June, a charge Tehran denies.

"We are keeping a close eye on what is happening there. And if something happens we are ready to act quickly and decisively," he said, after reports that Iran had seized a foreign tanker smuggling fuel in the Gulf.

About 20 million bpd of oil, or about a third of the oil traded globally, passed through the Strait, Birol said.

Key oil producers are looking for alternative routes. Iraq plans to export more oil to Turkey's port of Ceyhan and build new pipelines to deliver oil to ports in Syria, Lebanon and Saudi Arabia.

"In the very short-term, the effect of those options are not very huge. We should think of options and work on them.

"They will not bring a major change in the current markets but will be helpful in the medium and longer term," Birol said.

He said oil prices at around US\$65 a barrel priced in tensions relating to Iran, Libya and Venezuela, as well as concerns about the U.S.-Chinese trade row.

But he said he did not expect a big jump in prices because there was "a lot of oil and this is mainly thanks to the shale revolution in the United States."

Oil prices steadied on Friday after steep losses in the previous session, supported by rising tensions between the U.S. and Iran, but weighed by concerns slowing economic growth could dent global oil demand.

Benchmark crude prices were on track for weekly declines, having fallen sharply earlier in the week on demand worries.

Brent crude futures fell 3 cents to US\$61.90 a barrel by 1:37 a.m. Brent was on track to fall about 7 per cent for the week, its largest weekly loss since December.

West Texas Intermediate crude futures fell 24 cents to US\$55.06 a barrel. WTI was set to fall 8.4 per cent this week, its steepest loss since May.

Reuters



F. CARTER SMITH / BLOOMBERG VIA GETTY IMAGES

U.S. oil output was expected to grow by 1.8 million bpd in 2019, which would be slower than the 2.2 million bpd increase recorded in 2018, Fatih Birol said.

National Post - Toronto, Ontario, Canada
July 20, 2019, Sat • Page FP10

The International Energy Agency has joined the conspiracy outlining a \$3 trillion plan to restart the global economy while cutting greenhouse gas emissions, saying that governments have a "once-in-a-lifetime opportunity" to create jobs while decarbonizing infrastructure. This is Schwab's agenda showing the IEA has also now been surrendered with all other international agencies – i.e. IMF, WHO, World Bank, & BIS.

The IEA's very highly questionable economist Fatih Birol has participated in Schwab's World Economic Forum and has suddenly come out and proclaimed that the world has six months to avert a climate crisis. He has warned of the need to prevent post-lockdown surge in emissions. This is complete nonsense for this is the same story from this elitist consortium. He spouts out statements with NO SUPPORTING scientific evidence that is not in the charter of the IEA jurisdiction. Birol is pretending the world will end in 6 months if we allow people to use energy again when the IEA was to ensure there would be no energy crisis.

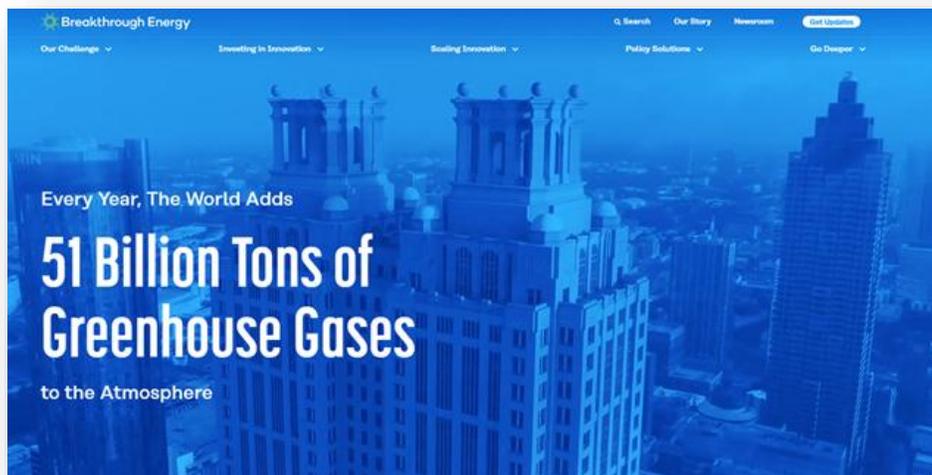


You can Google Fatih Birol and he is an economist with no background in climate. For decades his forecasts have been all about the

Introduction

rise and fall of energy – not climate change. The IEA is made up of 30 member countries, 8 association countries, and 2 accession countries all of which must be a member of OECD. You will find that the IEA accepts also private donations and Birol is also now linked to Schwab and his World Economic Forum. It is supposed to be within the OECD as an autonomous intergovernmental organization, headed by its Executive Director. The strange part is that its Governing Board is the main decision-making body and it is composed of energy ministers or their senior representatives from each member country. For the IEA's chief economist to come out of the blue with climate change forecasts are against the self-interests of member states that produce energy.

The IEA operates under the financial framework of the OECD. Countries and other energy stakeholders make “voluntary contributions” to support IEA programs. About a third of the IEA's spending is financed by “voluntary contributions”, most of which are from government sources.



Besides health, Gates has also been involved in buying into energy companies. He has put together a consortium of investors into Breakthrough Energy. While this operation has been funding thermal energy development in Japan, they are pushing for the elimination of fossil fuels in Europe as well. He has been funding many other secretive energy operations all of which will benefit by shutting down fossil fuels. He and his consortium have major stakes in alternative energy and stand to financially gain massively by keeping the world economy closed and the people locked in their houses.

Introduction

The biggest unintended consequence is to be found in the IEA's own May 17th press release. The IEA states:

"The contraction of oil and gas production will have far-reaching implications for all the countries and companies that produced these fuels. [...] Supplies become increasingly concentrated in a small number of low-cost producers. OPEC's share of a much-reduced global oil supply grows from around 37% in recent years to 52% in 2050, a level higher than at any point in the history of oil market."

The IEA's policies will certainly accelerate the huge slowdown we are about to experience in non-OPEC oil supply growth. It is really amazing that we have an



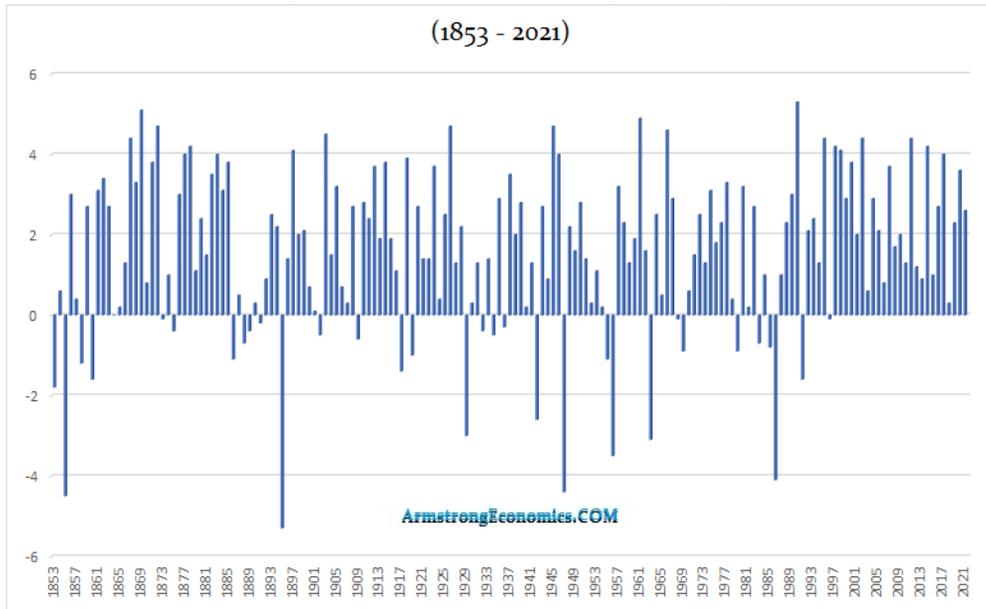
agency created to manage the oil supply to prevent price shocks as during the Seventies advocating the very destruction of oil production. How many wars have been fought over energy?

As the Biden Administration does its best to reduce US oil production after decades of seeking self-reliance, the net

result will ironically mean that OPEC will gain market share and pricing power once again as was the case during the 1970s. The development of US shale oil production added nearly 10 mm barrels per day to the non-OPEC oil supply. This is what put economic pressure on OPEC forcing them into a defensive position. Hence, Saudi Arabia and UAE made a decision to expand their economies. The UAE was pushing to become the new Switzerland in finance.

Now that non-OPEC oil supply is contracting thanks to Biden, OPEC sits in the driver seat as it is regaining market share and pricing power. Significant potential price spikes may indeed become also politically driven as was the case during the Seventies. This is that thanks to the Biden Administration, we may actually see the collapse of non-OPEC supply outpace demand which would put pressure on OPEC allowing them to raise prices as we have a political-induce energy crisis.

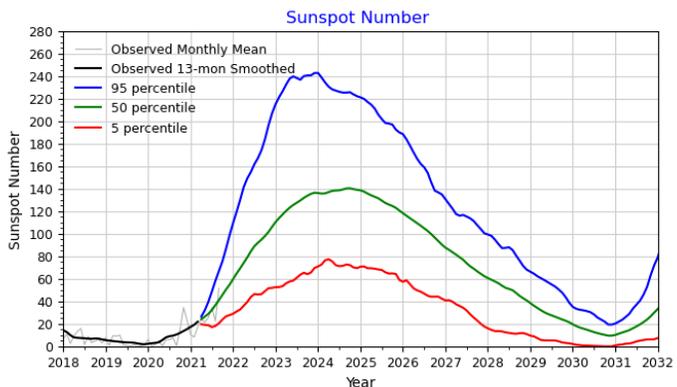
Oxford England February Average Temperature



Here is a look at our more recent climate data. The lowest temperature in Oxford England since 1853 took place in 1895 and the highest temperature was in 1990. In part, the global warming movement only looks at the data post-1850 and conclude the Industrial Revolution is to blame for they always try to reduce everything to a single cause and effect.

However, temperatures peaked in 1990 and have been gradually declining since that turning point. Ironically, from a cyclical perspective, we should be looking at a move toward colder winters and with the Gulf Stream also weakening, Europe can be thrust into a very cold trend for winters in the years ahead. If this proves correct, then this will further be pressuring demand to exceed supply in the non-OPEC region. NASA's own projections for moving into Solar Minimum will not end until 2031 after a peak in 2024.

During solar minimum is where we will see more volcanoes and colder temperatures. This warns that their cutting of all fossil fuels is coming at the worst possible time. Post-2024 can see very cold period into 2037 on our model.

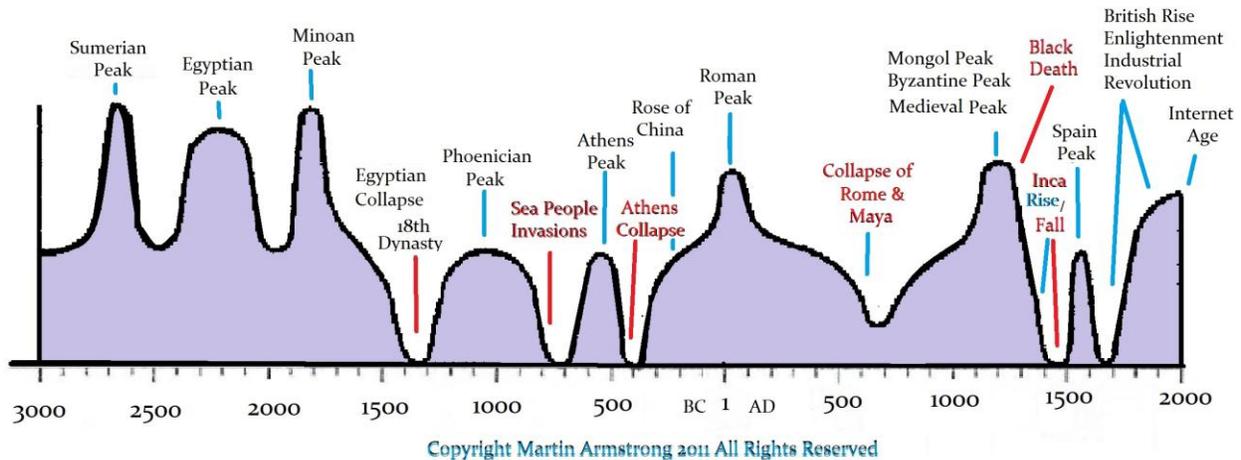




Obviously, not only will the weather turn colder, not warmer, but they are already preparing German citizens for blackouts arriving in the wintertime. Here we have the world's sixth-largest economy preparing for an energy shortage crisis. Germany can no longer power itself to protect its own citizens because of Merkel's decisions. Merkel banned nuclear following the Japanese nuclear accident and Germany's Energiewende has descended into chaos amid coalition bickering. Onshore wind is in a freefall, and confusion over offshore targets and a debilitating cap on solar support has increased the uncertainty. The truth is that this problem of an energy crisis is European-wide. This should make the next two winters very interesting.

Indeed, the IEA called on Russia to increase gas production for Europe is going to freeze thanks to the reduction in energy production in the West. You really cannot make up this mess where these people champion the destruction of energy production and then plead for more from those, they call the enemy.

Rise & Fall of Empires, Nations & City States Based upon the Energy Output of the Sun



The historical record is very clear. Civilization falls when it turns very cold. They rise during warming periods. Measuring what they call “norm” is to return the climate to pre-Industrial Revolution which was of course the Little Ice Age that we were just starting to emerge going into the beginning of the 19th century. They appear to be setting humanity up for a major depopulation period for that is what takes place during cold periods.

When John Adams set out to travel to Philadelphia, it was bitterly cold and there was a foot or more of snow that covered the landscape that had blanketed Massachusetts from one end of the province to the other. Beneath the snow, after weeks of severe cold, the ground was frozen solid to a depth of two feet. Packed ice in the road made the journey very hazardous. In a letter to his wife, John Adams wrote:

“Indeed I feel not a little out of Humour, from Indisposition of Body. You know, I cannot pass a Spring, or fall, without an ill Turn — and I have had one these four or five Weeks — a Cold, as usual. Warm Weather, and a little Exercise, with a little Medicine, I suppose will cure me as usual. ... Posterity! You will never know, how much it cost the present Generation, to preserve your Freedom! I hope you will make a good Use of it. If you do not, I shall repent in Heaven, that I ever took half the Pains to preserve it.”

Introduction



Our model which still shows the Financial Capital of the World shifting to China, appears to be on track as China has made significant new highs in oil consumption implying that their economic position will eventually be stronger than in the United States and Europe. There is a new “Oil Crisis” emerging on the horizon that appears to be deliberately created by the climate change movement even if the politicians fail to look beyond the money being stuffed in their pockets to look the other way.

The Invesco Solar ETF (TAN) versus the Energy Select Sector SPDR Fund (XLE) has demonstrated that the TAN, which holds solar and other green energy stocks, has dropped over 20% by mid-year 2021 while the XLE, which holds traditional energy companies like Exxon Mobil (XOM) and Chevron (CVX), has rallied by 44% during the same period. Despite the fact that Biden is trying to destroy fossil fuels, he has been the reason for the divergence sending GREEN down and Fossil up.

The Nuclear Option



With all the hype over climate change, a number of key U.S. allies in the West have turned their eyes toward nuclear power as the only real way to work to cut carbon emissions and insulate themselves against the economic disruption caused by volatile fossil fuel prices. There is no question that wind and solar power will not save the day. There is just no possible way to replace the current energy production with alternative renewables. This is the dream of environmental fools and the political promises that they could care less about being true.

Most electric cars will travel 200 to 300 miles and then you have to plug it into a charging station that will take on average 2 hours. If you really travelled 3,000 miles across country and you were able to reach 300 miles, you will spend 20 hours recharging. That is not going to cut it for trucks and servicing the supply chain.

Congress has been trying to bolster the nuclear fleet through the bipartisan infrastructure bill. That bill would only provide billions in funding to support the demonstration of advanced and small nuclear reactor technology and aid financially compromised nuclear power plants. Let's face it, there is far too much self-interest in politics to ever get off the ground with a truly honest bill that puts the country first.

The Nuclear Option

Then you have the deep divide within the Democrats over the whole Build Back Better agenda from Klaus Schwab and the prospects got the New Green Deal. Indeed, this only makes the nuclear power question rather murky in the world of partisan politics.



A key feature, the clean electricity payment program, would have effectively subsidized nuclear as a zero-emissions power source but that was dropped because of opposition from Democratic Sen. Joe Manchin of West Virginia. As a result, legislators are looking for other ways to keep nuclear plants alive, but many liberal Democrats remain skeptical of it and maintain a strong preference for renewable wind and solar despite the fact that such an energy source is hopeless to replace everything including the internet.

In Japan, where the issue is less toxic, a top official in Japan's ruling Liberal Democratic Party has signaled that country's decarbonization targets are out of reach without restarting its closed reactors. Due to of the nuclear disaster, they are not so eager to surrender all fossil fuels.

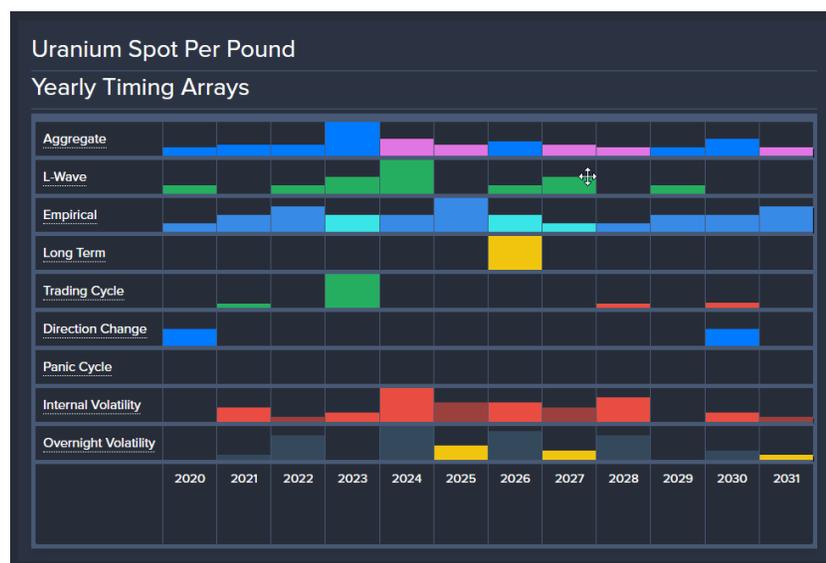
The British government, which committed itself to a target of 100% clean electricity by 2035, had to fire up coal to produce electricity or standby and people will freeze. They are planning to create nuclear power to be at the core of its power sector in the coming decades. But that is not now.

The Nuclear Option

In France, which has a larger share of nuclear-generated power than any other country in Europe at upward of 70%, President Emmanuel Macron's government has committed to spending \$35 billion over the next decade to "reindustrialize" France. Part of that "France 2030" plan involves the deployment of new small nuclear reactors. Ironically, in this new green environment, France is ahead of the rest of the European pack. Merkel in Germany banned nuclear power following the Japan disaster.



When we look at Uranium, we can see that it has bounced for 5 years from the low, but technically it has still not yet broken out to the upside. Nevertheless, we



do see a key target coming up in 2023. From that point onward, we see that volatility will rise and the next major turning point will be 2028. We see key resistance for the closing of 2021 to be 44 but a closing below 40 may warn that the 2023 target could produce a low despite the hype.

The Energy Crisis in Poland



EU court fines Poland €500K a day over refusal to shut down coal mine

Warsaw responded by saying it won't halt operations.



When we look at Eastern Europe, the Czech Republic has actually requested the European Union to force Poland to shut down a coal mine in Turow that feeds the nearby power station. The EU court ordered the largest fine in its history in September 2021, ordering that Poland pay €500,000 per day for being in violation. Polish Prime Minister Mateusz Morawiecki has refused to comply with the court order. Czech has said they are harming their country and one can see how now using coal can escalate into actually war under the stupidity of this climate change agenda.

The Energy Crisis in Poland



The Polish Zloty has declined from its major high against the Euro made back during 2008 moving to a low in 2016. Poland's energy is supplied by coal which dominates the power sector of Poland. It is the largest source of greenhouse gas emissions according to the IEA but it is also a major employer. However, it is second to Germany in coal power generation. While the country has strongly expanded renewable energy over the past decade, its future role in the energy supply mix needs to be clarified.

This stands in contrast to the Czech Republic. Energy policy in the Czech Republic is guided by the State Energy Policy (SEP). Key targets have been to reduce energy consumption, yet improve the energy intensity of the economy and to expand nuclear power by about 2 500 MW by around 2035. The Slovak Republic's energy policies have been directed at making significant progress in supporting the European Union climate objectives. Slovakia has been strengthening cross-border connections for electricity, natural gas and oil, improving its energy security and increasing market competition. It is obviously not even close to being self-sufficient.

Poland, on the other hand, has called upon the European Union to cancel or delay parts of its plan to tackle climate change in response to surging gas and electricity prices. Poland is the second-largest coal producer in Europe behind Germany.

Poland produces small quantities of crude oil and natural gas, and it is a net crude oil and natural gas importer. The country contains shale resources, but companies

The Energy Crisis in Poland

exploring for economically recoverable volumes have had underwhelming results. As a result, exploration work has been discontinued.

In 2019, Poland's total primary energy consumption was 4.06 quadrillion British thermal unit (Btu). Consumption of coal accounted for 45%. Petroleum and other liquids (31%), natural gas (17%), and renewable energy sources including hydropower (7%) accounted for the remaining shares of consumption. You can see that alternative energy is simply not there to support such a transition.

Meanwhile, Poland is working to reduce its dependence on Russian energy imports.

Russia Largest Producer



Russia is the world's largest producer of crude oil which includes lease condensate. It is the second-largest producer of dry natural gas. Russia also produces significant amounts of coal. Consequently, Russia's economy is highly dependent on its hydrocarbons, and oil and natural gas revenues account for more than one-third of the federal budget revenues.

Russia is a major producer and exporter of oil and natural gas with Europe being a major customer. Russia's economic growth is driven by energy exports, given its high oil and natural gas production. Oil and natural gas revenues accounts for almost 40% of Russia's federal budget revenues.

Russia was the world's largest producer of crude oil including lease condensate and the third-largest producer of petroleum and other liquids after Saudi Arabia and the United States. Russia was the second-largest producer of dry natural gas and is only second to the United States, but under the Biden Administration, Russia will surpass the United States.

Russia and Europe are interdependent in terms of energy. Europe is dependent on Russia as a source of supply for both oil and natural gas. More than one-third of crude oil imports to European countries come from Russia. In fact, more than 70% of all-natural gas imports to Europe comes from Russia.

Nonetheless, Russia is equally dependent on Europe as a market for its oil and natural gas and the revenues those exports generate. Indeed, nearly 60% of

Russia Largest Producer

Russia's crude oil exports and more than 75% of Russia's natural gas exports went to Europe.

In addition, Russia is also the fourth-largest generator of nuclear power in the world and it has the fifth-largest installed nuclear capacity. Its energy production of natural gas is about 52% of its output with oil accounting for 22% and coal about 13%. Insofar as its alternative energy production, Russia has been looking into solar, geothermal, bio-fuel and especially wind energy, but there is hardly any Russian technology available yet that is viable for export.



Meanwhile, the entire Syrian Middle East crisis was all about trying to undermine Russia as the energy source for Europe. To understand what was really behind the curtain regarding the Middle East, the USA's strategic attempt to reduce Russia's control over energy to Europe began back in 2009 when Qatar proposed a pipeline plan to Assad of Syria to send its natural gas to Europe via Saudi Arabia, Jordan, Syria, Turkey, and off to Europe. Assad refused the proposition and suddenly Obama wanted to invade Syria to protect its people but was shut down.



Russia Largest Producer



The Obama Administration could not sell another invasion when the last one there were no weapons of mass-destruction. Americans were tired of these endless wars for the profit of people friendly with government. Assad's long-time ally, Russia, was the real target of Obama.

It was just one year after Qatar's proposal that Assad began negotiations for another pipeline plan with Iran, which would carry Iranian gas to Europe across Iraq and Syria. Russia endorsed this project since it clearly would have more control over gas flow rather than the U.S. linked Qatar. This agreement would strategically place control of the gas flow to Europe in Russia's hands. Consequently, the Iranian pipeline became a priority for Russia. Since Damascus and Moscow began working together to block the Qatar pipeline and create the alternative Iranian pipeline, which created the political conflict for the USA. It was a chess game and Russia simply called it – Check.

Obama was targeting Russia from the outset. There was a meeting between Obama and Putin at the United Nations where Putin tried to get Obama to side with Syria against ISIS. Obama rejected the proposal. Consequently, when Russian forces entered Syria on the ECM turning point 2015.75 to the day, it was an ominous event. Russia was not only backing the Assad regime, but it was also backing the Iranian pipeline.

Russia Largest Producer

Obama was proposing lifting sanctions on Iran in an effort to break that alliance with Russia all over the pipeline. Obama has been attempting to isolate Russia to prevent its control of the main energy market into Europe. This is why Russia is backing Syria, Iran, and Iraq as well. Russia's presence in Syria is aimed obviously at something more than merely supporting Assad. Russia was acting within its economic self-interest to maintain control of its energy pipelines, which also went through Ukraine.



The Nord Stream 2 pipeline is completed and ready to pump Russian gas to Europe. Opposing the Russian gas pipeline was the strategic policy for the Obama Administration in its cold war with Russia. But as the weather turns colder and the lack of alternative energy any time soon, the United States opposition had to give way to reality. The Biden administration's peremptory reversal was the only course of action despite the cries of the climate change movement.

The decision by the Biden administration to waive sanctions on the Nord Stream 2 pipeline between Russia and Germany effectively gave the greenlight to Russia. On October 17th, 2021, Germany's Green party gave its blessing to opening formal coalition talks on a new government that would speed up the country's exit from coal-fueled power and the expansion of renewable energy. No gas has been flowing through the pipeline pending German regulatory review. This could be complicated if the Greens enter a coalition government.

The sanctions imposed on Russia and the initial lower oil prices, combined to reduce foreign investment in Russia's upstream, especially in Arctic offshore and shale projects, and they have made financing projects more difficult. Now with an energy crisis looming from above, the response caused by the COVID Crash of 2020 has also contributed to reducing the supply going forward.

Power Grid Risks



The Sun certainly poses a risk to our electronic world. This 4th Industrial Revolution, as Schwab calls it, is susceptible to space weather – great bursts of electromagnetic energy and particles that can stream from the sun. On the morning of September 1st, 1859, amateur astronomer Richard Carrington in his private observatory outside of London, when he spotted what he described as “two patches of intensely bright and white light” erupting from the sunspots. Five minutes later the fireballs vanished, but within hours their impact would be felt across the globe.

That night, telegraph communications around the world began to fail. All around the globe there were colorful auroras illuminating the nighttime skies to the point many believed it was day. Some even believed it was the end of the world. However, Carrington’s naked eyes had spotted the true cause for the bizarre happenings. It was a massive solar flare with the energy of 10 billion atomic bombs. That was hurled toward our planet. This was a major geomagnetic storm that historians have called the “Carrington Event” that is the best-known historical account of such a wave. There may be ancient accounts of comets that appeared at the birth of Christ or the death of Julius Caesar. But the ancients did not really understand electromagnetic waves.

Ancient observations have been recorded of electromagnetic storms which include accounts in the Bible as well as from Aristotle in antiquity. There are no reliable records of a luminous phenomenon covering the entire sky as was the case with the Carrington Event. That does not mean that did not exist. The Bible does state: *“And now men see not the light which is bright in the skies; but the*

Power Grid Risks

wind passeth, and cleanseth them. Out of the north cometh golden splendour, about God is terrible majesty" Jewish Publication Society Bible, Job 37: 21–22.

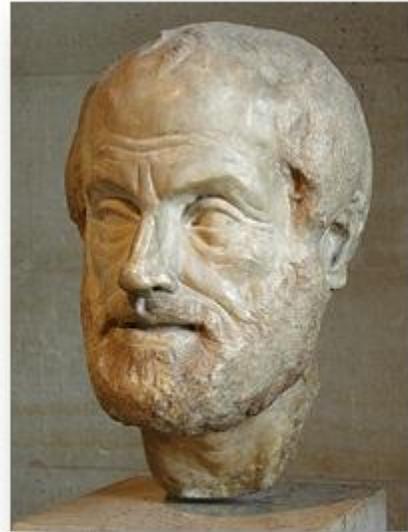
It was actually Aristotle (384–322BC) who made the correlation with meteorology that he linked the red color in the sky with the influence of a long path in air at sunrise and sunsets. Unfortunately, there are no well documented ancient records that would allow us to develop a definitive cycle for such events.

Human society did not come to understand electricity and magnetism under the 18th century. Galileo did become interested in the observation of sunspots during the early 17th century.

It was Johann Carl Friedrich Gauss (1777–1855) who for the first time associated magnetic and auroral observations. Gauss observed that magnetic storms coincidence with aurora displays in the sky. Moreover, Gauss and his collaborator Wilhelm Eduard Weber (1804–1891), developed an electrical two wired telegraph in 1833 for the synchronization of observations and tested the transmission of words through an elaborate code. Their scientific breakthrough led to the first



Johann Carl Friedrich Gauss
(1777–1855)



Aristotle
(384–322BC)

commercial patent by 1837 for a five wired telegraph. Electrical communication was born between London, Liverpool, Manchester and Birmingham following alongside the new railroad network. The objective was to create a scientific network coordinating magnetic observatories.

In the United States, similar developments emerged led by Morse creating a stable telegraph system which became Morse Code. It was the British network which was the first to report electrical disruptions that were related to an auroral phenomenon in 1847.



Carrington Event - September 1st, 1859

Looking at the September 1st, 1859 Carrington event and the 1847 event, was about 11/12 years apart and indicate this took place during solar maximum of the Sunspot cycle.

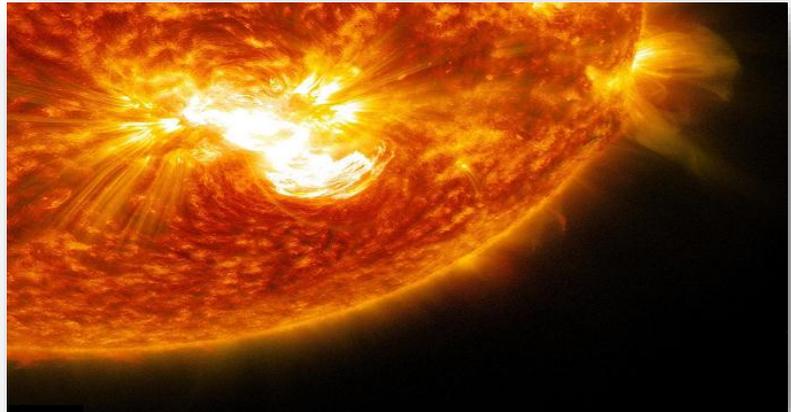
At 4:51 p.m. EDT, on Monday, April 2nd, 2001, the sun unleashed the biggest solar flare ever recorded, as observed by the Solar and Heliospheric Observatory (SOHO) satellite. The flare was definitely more powerful than the famous solar flare on March 6, 1989, which was related to the disruption of power grids in Canada. This recent explosion from the active region near the sun's northwest limb hurled a coronal mass ejection into space at a whopping speed of roughly 7.2 million kilometers per hour. Luckily, the flare was not aimed directly towards Earth.

Therefore, we have major solar flares taking place but they are not all directed at our planet. Cyclically, using the near-term data, it is possible to project a potential cyclical pattern. There appear to be a 13-interval cycle of sunspot insofar as intensity is concerned. The 2001 incident was 13 sunspot cycles previously to the Carrington Event.

Power Grid Risks

There appear to have been two periods of frequency 1872–1882 and again 1903–1909. The next period of intensity may unfold 2024/2025. They tend to be a minor cycle turn up from 2020 which may be more noticeable 2022/2023.

The importance of this is simply to point out that these people fail to comprehend that a more storm like the Carrington Event could seriously damage the grid bringing life 100% dependent upon electricity highly vulnerable.



The United States even developed an electromagnetic pulse weapon (EMP) pistol which would be effective against

robots. Sonic weapons would be effective against people whereas the EM weapon would have no impact on biological organisms.

Nevertheless, EMP weapons are being developed where a missile could be detonated above a city that would knockout all electricity and potentially severely damage all electronics and telecommunications infrastructure.

There are at least two types of events that can cause an EMP shockwave other than the sun. A small scale EMP attack could be devastating. EMP events can also be caused by nuclear attacks. Low-yield nuclear weapons detonated in the atmosphere would also create a wave of energy that fries electronic equipment and could even knock out the power grid of affected countries.

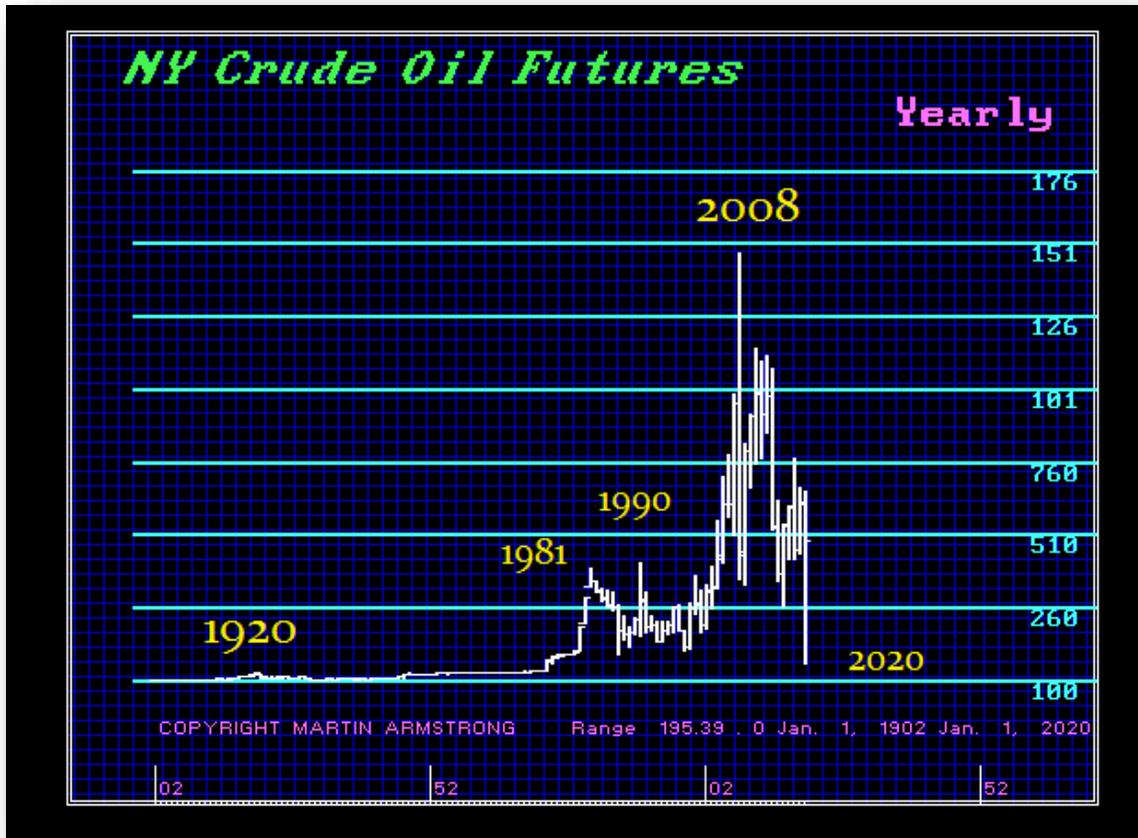
Power grids could be knocked out worldwide by a weapon that could be specifically designed to cause a destructive surge of energy.



The Socrates Generated Commentary

The Socrates Generated Commentary

NY CRUDE OIL FUTURES



On the Yearly Level, considering all timing factors, the likelihood that 2020 was a major low was very high which was a perfect 12 year Panic Cycle to the downside. Now, a year-end closing above the 2020 high of 6565 will provide a technical indication that the Directional Change for 2020 also is correct. Moreover, 2021 is another Directional Change and a Panic Cycle on our long-term database. The next target for a turning point appears to be shaping up as 2023. Meanwhile, volatility should continue to build into 2023.

The strongest target in the Yearly array is 2023 for a turning point ahead, at least on a closing basis. That would be a standard 3-year reaction. It does appear we have a confusing period following 2020 into 2021. Thereafter, we see the next target coming into play as 2023 which some choppiness in 2024 into 2025. The volatility should until 2025 with again each target producing the opposite

NY CRUDE OIL FUTURES

direction for that 3-year period. The volatility should overall continue to build into 2026.

Keep in mind that given the dramatic decline of 91% from the last high established during 2008, we did elect a year-end Bullish Reversal on the close of 2020 confirming that should be a major historical low. Now the main Yearly Bullish Reversal to watch will be 7692 and a yearly closing above that would signal a further panic to the upside to test \$100.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, ever since the low of 1905, there have been 3 major lows with each being higher than the previous which is indicative of a protracted long-term bull market. Therefore, this last major low established in 2020 should hold from here on out.

ECM COMMENTARY

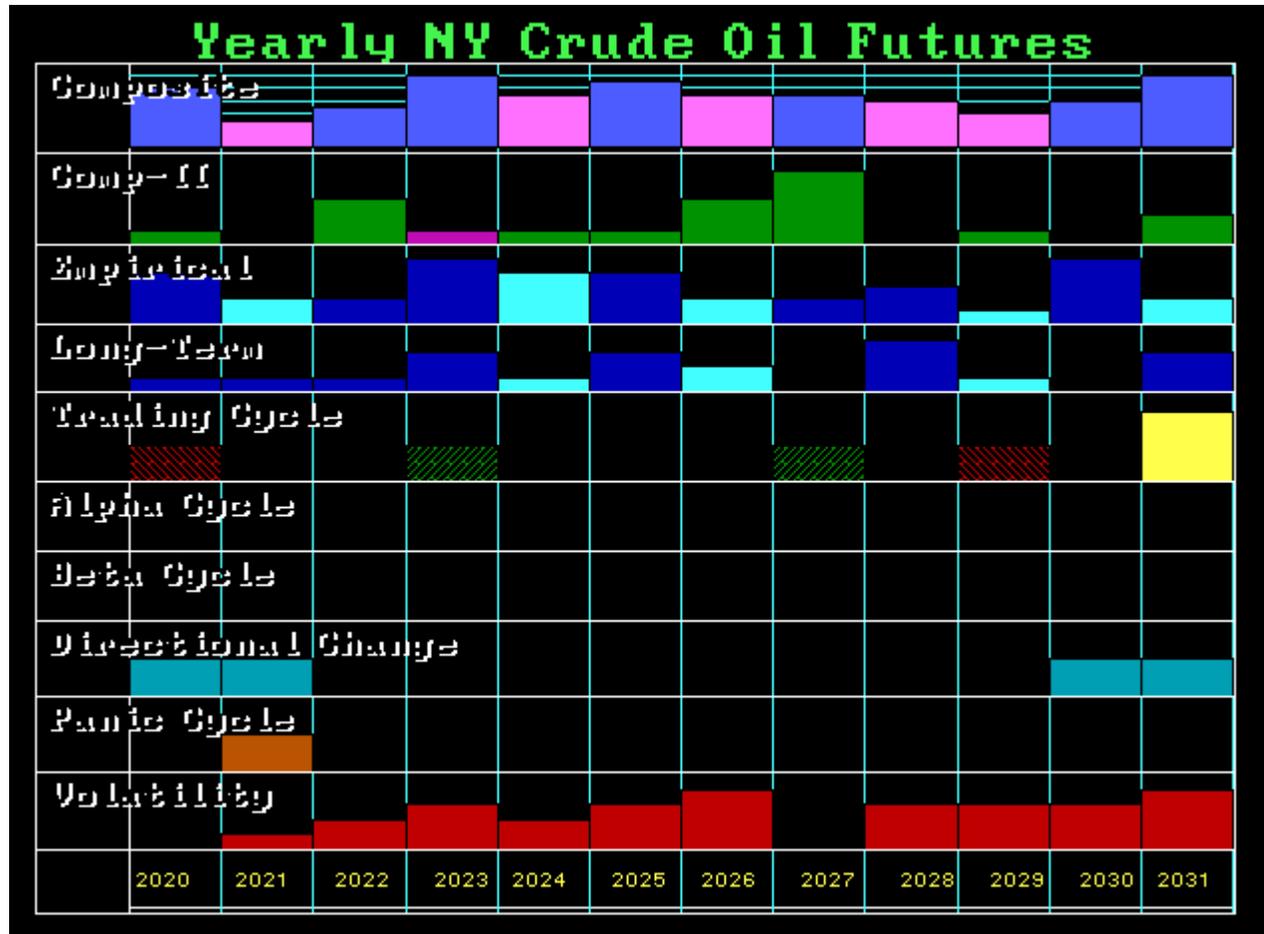
Looking at our Economic Confidence Model, the last turning point was 625 days ago. The last ECM target date was Jan. 18, 2020 where this market made a cycle high. This suggests that perhaps the next target Mar. 13, 2022 could produce a turning point but the Monthly Array shows January 2022 with a Directional Change in February and a turning point in March 2022.

YEARLY ANALYSIS PERSPECTIVE

On the yearly level in NY Crude Oil Futures, the last important low was established during 2020 at 650, which was down 12 years from the high made back during 2008. This market came to test the Yearly Bearish Reversal at 3500 bottoming at 650 but failed to close below it. Instead, it closed above a Yearly Bullish Reversal at 2300.

YEARLY TECHNICAL ANALYSIS

2021/01/01...	3032	5579	6025	8683	17333
2022/01/01...	3118	4876	6241	9015	18041
2023/01/01...	3203	4172	6456	9346	18748
2024/01/01...	3289	3468	6672	9677	19455
2025/01/01...	3375	2765	6888	10008	20163
2026/01/01...	3460	2061	7103	10340	20870
2027/01/01...	3546	1357	7319	10671	21577



YEARLY TIMING ANALYSIS

Probing into the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2023, 2025, 2027 and 2031. Centering on the patterns unfolding, we do see a prospect of a decline moving into 2023 with the opposite trend thereafter into 2025. This pattern becomes a possibility if the market closed back below last year’s high of 650 at a minimum. Closing this year above last year’s high warns that a cycle inversion is possible with a rally into the next target.

YEARLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2021, during 2030 and during 2031. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY INDICATING RANGE STUDY

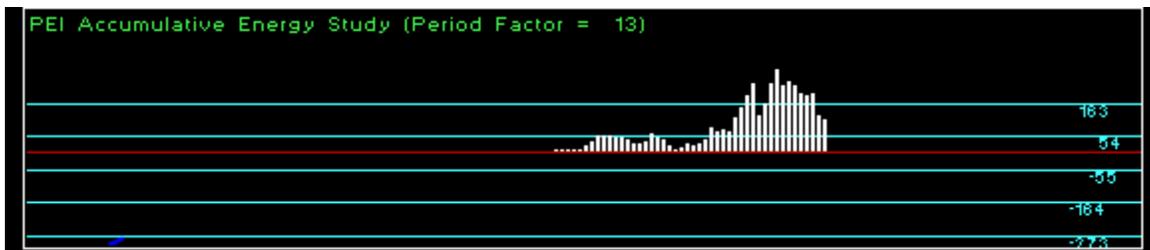
Indicator Description... Trend

Immediate Trend	- Neutral -
Short-Term Momentum	- Neutral -
Short-Term Trend	- Neutral -
Intermediate Momentum	(Bearish)
Intermediate Trend	(Bearish)
Long-Term Trend	BULLISH
Cyclical Strength.....	BULLISH
Broader Trend	BULLISH
Long-Term Cyclical Trend ..	BULLISH



STOCHASTICS

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.



ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2012 whereas the actual market high in price unfolded back in 2008. This is rather indicative of the fact that the broader term means that eventually

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higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow.

REVERSAL COMMENTARY

Our Yearly Bullish Reversals stand at 7692, 9931 and 11230. On our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 7698. These Tentative Hypothetical Bearish Reversals would rest at 1066, whereas only a close below the previous low 650 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several years – unlikely.



QUARTERLY ANALYSIS PERSPECTIVE

HEDGING MODEL

Employing our Quarterly Hedging Model using our Reversal System only, we are currently long since during the Fourth Quarter 2020 on that close when we

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reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 6430. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Quarterly Level, with respect to time, there was a prospect of a temporary high since the market has reached our first Quarterly target being The Third Quarter 2021. A closing below our Momentum Projection standing at 8616 will signal that we have a pullback possibly into the next turning point due in the Second Quarter 2022 leaving The Third Quarter 2021 as a temporary high. Yet, this market is still holding our Momentum support level resting at 7110, indicating the broader trend has not been negated at this moment. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Fourth Quarter 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting the Second Quarter 2022 until the Third Quarter 2022 with each target producing the opposite direction for that 2-quarter period.

Keep in mind that given the sharp decline of 19% from the last high established the Third Quarter 2021, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Quarterly Bearish Reversal comes into play at 6430. We have Quarterly Directional Change targets due the First Quarter 2023 and the Second Quarter 2024. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

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MONTHLY ANALYSIS PERSPECTIVE

Up to this moment in time, we have elected all four of the Month Bullish Reversals from the April 2020 low of 650. The next major Month Bullish Reversal stands at 10075. We have a minor Monthly Bullish Reversal standing at 7530 and this will provide the next target objective for resistance and the point of breakout to expect further upside in the years ahead.



MONTHLY TURNING POINTS

Centering on time, I do see a prospective target on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for October, November/December, January 2022 and March 2022, June 2022. Centering on the patterns unfolding, I do see a prospect of a decline moving in November/December with the opposite trend thereafter into January 2022. However, should November breakout to the upside since it is also a Directional Change, then we would expect a high in December and a one-month correction into January.

MONTHLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are October, November and February 2022.

MONTHLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during November and then March/April 2022.

HEDGING MODEL

Using our Monthly Hedging Model based on the Reversal System exclusively, we are currently long since May 2020 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 5760. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

MONTHLY LEVEL INDICATING RANGES

Indicator Description... Trend

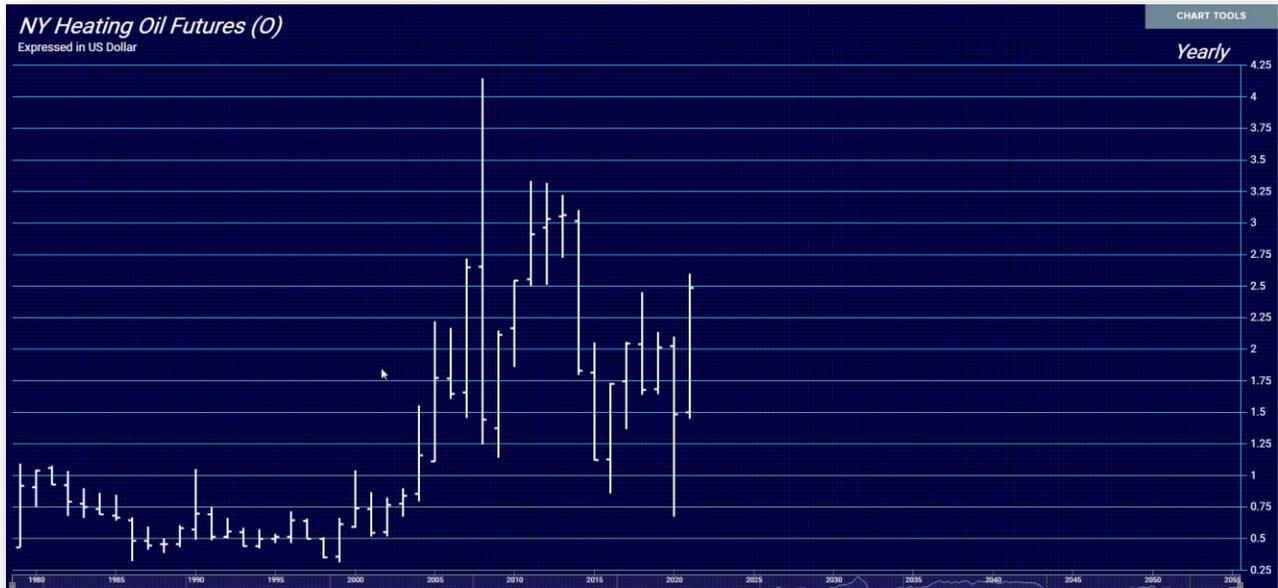
Immediate Trend BULLISH
 Short-Term Momentum BULLISH
 Short-Term Trend BULLISH
 Intermediate Momentum BULLISH
 Intermediate Trend BULLISH
 Long-Term Trend BULLISH
 Cyclical Strength..... BULLISH
 Broader Trend BULLISH
 Long-Term Cyclical Trend .. (Bearish)

MARKET RISK FACTOR

----- UPSIDE RISK ----- DOWNSIDE RISK ----

MONTHLY.....	7700	1.476%	5750	24.22%
QUARTERLY.....	7700	1.476%	6430	15.26%
YEARLY.....	9207	21.33%	3500	53.87%

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The major high took place during 2008 that was 12 years ago, which was a perfect 12-year panic cycle. On the Yearly Level, with respect to time, there was a prospect of a temporary low since the market is trading at 23827 above the previous Yearly closing 14854. Maintaining a closing above our Momentum Projection residing at 23451 will signal that the market is finding strength right now. However, a higher closing would still leave the last low as a key target and the next turning point will be 2021. Yet, this market is also trading above our momentum resistance at 21142, which is providing support right now on a closing basis. This turning point 2020 also matched the turning point on the Economic Confidence Model implying it was significant (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2022 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting 2020 until 2022 with each target producing the opposite direction for that 3-year period. Thereafter, we see the next target coming into play as 2024 until 2028, but we do

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have a key target arriving also 2027 with again each target producing the opposite direction for that 5-year period.

However, the important target during that period will be 2027.

Keep in mind that given the dramatic decline of 72% from the last high established during 2018, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 1 Bearish Reversal from the last high thus far to date.

The historical broader tone of the NY Heating Oil Futures has been a bearish consolidation following the high established back in 2008. Since then, this market has created 2 reaction highs which have been unable to break this overall protracted bearish consolidating trend. Still, the major low was made in 2020 and the market has bounced back for the last year. The last Yearly Reversal to be elected was a Bearish at the close of 2020.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, this market was in a bullish trend since the major low took place back in 1999 with the high forming during 2008 amounting to a 9-year bull market. Following that high, the market has consolidated for 12 years. Distinctly, we have not elected any Yearly Bearish Reversal to date from the turning point of 2008.

The last major low took place during 2020 which was last year. The last near-term low took place just 2020 and the previous major high was 2008 which was 41450. This raises the potential that last year's low is a major low. A closing above last year's high of 20995 will tend to confirm that low should hold for now.

YEARLY ANALYSIS PERSPECTIVE

On the yearly level in NY Heating Oil Futures, the last important low was established during 2020 at 6731, which was down 2 years from the high made back during 2018 at 24496. This market came to test the Yearly Bearish Reversal at 11140 bottoming at 6731 but failed to close below it. However, the highest closing was during 2017 at 20438 whereas the intraday high formed in 2018.

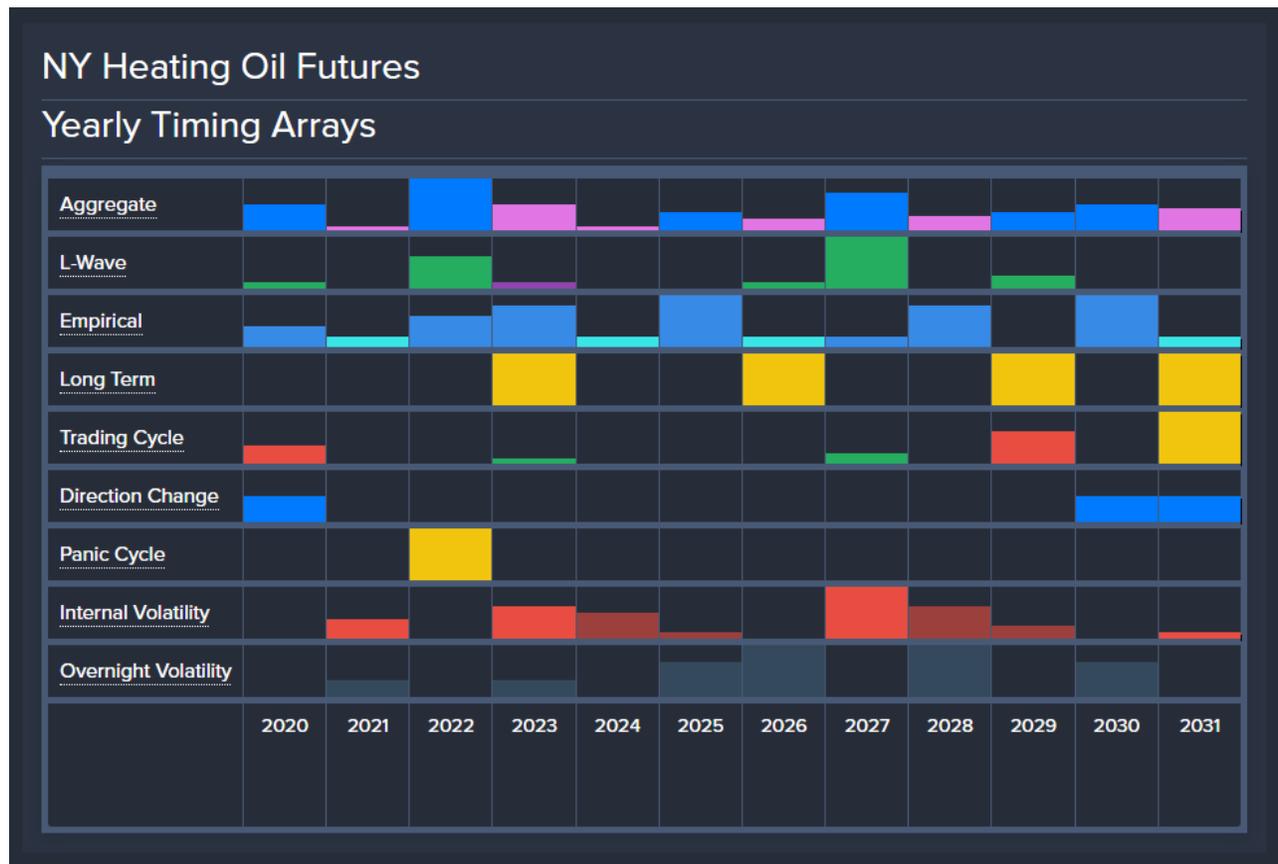
NY HEATING OIL FUTURES

Right now, as stated, the market is trading above last year's high of 20995. Overall, the market has been in a long-term bearish trend.

Examining the yearly time level, we can now see that there is a 6.70% risk on the upside, where we show a clear downside risk factor at 53%. From a risk perspective, resistance on a closing basis stands at 25425 whereas the risk on the downside begins at 11140.

YEARLY TECHNICAL ANALYSIS

2021/01/01...	10149	17939	19410	33923	40783
2022/01/01...	10469	18613	17715	35304	42495
2023/01/01...	10789	19287	16019	36685	44207
2024/01/01...	11108	19960	14324	38066	45919
2025/01/01...	11428	20634	12629	39447	47631
2026/01/01...	11747	21308	10933	40828	49343
2027/01/01...	12067	21981	9238	42209	51055



YEARLY TIMING ANALYSIS

Probing into the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2022, 2025, 2027 and 2030. Centering on the patterns unfolding, we do see a prospect of a rally moving into 2022 with the opposite trend thereafter into 2025.

YEARLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2030 and during 2031. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2028. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Nonetheless, our Panic Cycle target, for the next period to watch is during 2022. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Discernably, the far-reaching prospective view recognizes that the current trend is strong since the last important low established last April 2020, the market has rallied for the past 17 months and we have exceeded last month's high. Furthermore, the NY Heating Oil Futures remains positive since we are trading above last year's high. Presently, we have made a reaction low in 2020 which was a 12-year decline. Since that reaction low of 2020, this market has bounced up to now this year with this year exceeding last year's high. We are trading above last year's high of 20995, but at the very least this market must close above that to maintain a bullish posture. A year-end closing below 16383 will signal a resumption of the decline whereas a closing below 11140 will signal it is possible to penetrate last year's low of 6731.

INDICATING RANGE STUDY

Focusing on our perspective using the indicating ranges on the Yearly level in the NY Heating Oil Futures, this market remains neutral with resistance standing at 17966 and support forming below at 13627. The market is trading closer to the support level at this time.

Yearly Indicating Ranges

Immediate Trend bearish
Short-Term Momentum neutral
Short-Term Trend bearish
Intermediate Momentum neutral
Intermedia Trend neutral
Long-Term Trend bullish
Cyclical Strength bullish

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE

Last Close Was. 14854

Envelope Top... 25567
Internal AvgL.. 12346
Internal AvgH.. 22322
Envelope Btm... 16005

STOCHASTICS

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2013 whereas the actual market high in price unfolded back in 2008. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow.

REVERSAL COMMENTARY

Utilizing our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 23867. These Tentative Hypothetical Bearish Reversals would rest at 3382, 8552, 16436, and 18581, whereas a close below the previous low 6731 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2020 LOW:

Sun. 01/01/2023
Wed. 01/01/2025
Sat. 01/01/2028
Sat. 01/01/2033
Tue. 01/01/2041
Thu. 01/01/2054
Tue. 01/01/2075
Wed. 01/01/2109
Mon. 01/01/2164

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Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous LOW at 6731

23% | 8320
38% | 9302
61% | 10891
78% | 12022

Fibonacci Percentage Golden Ratio Movements:

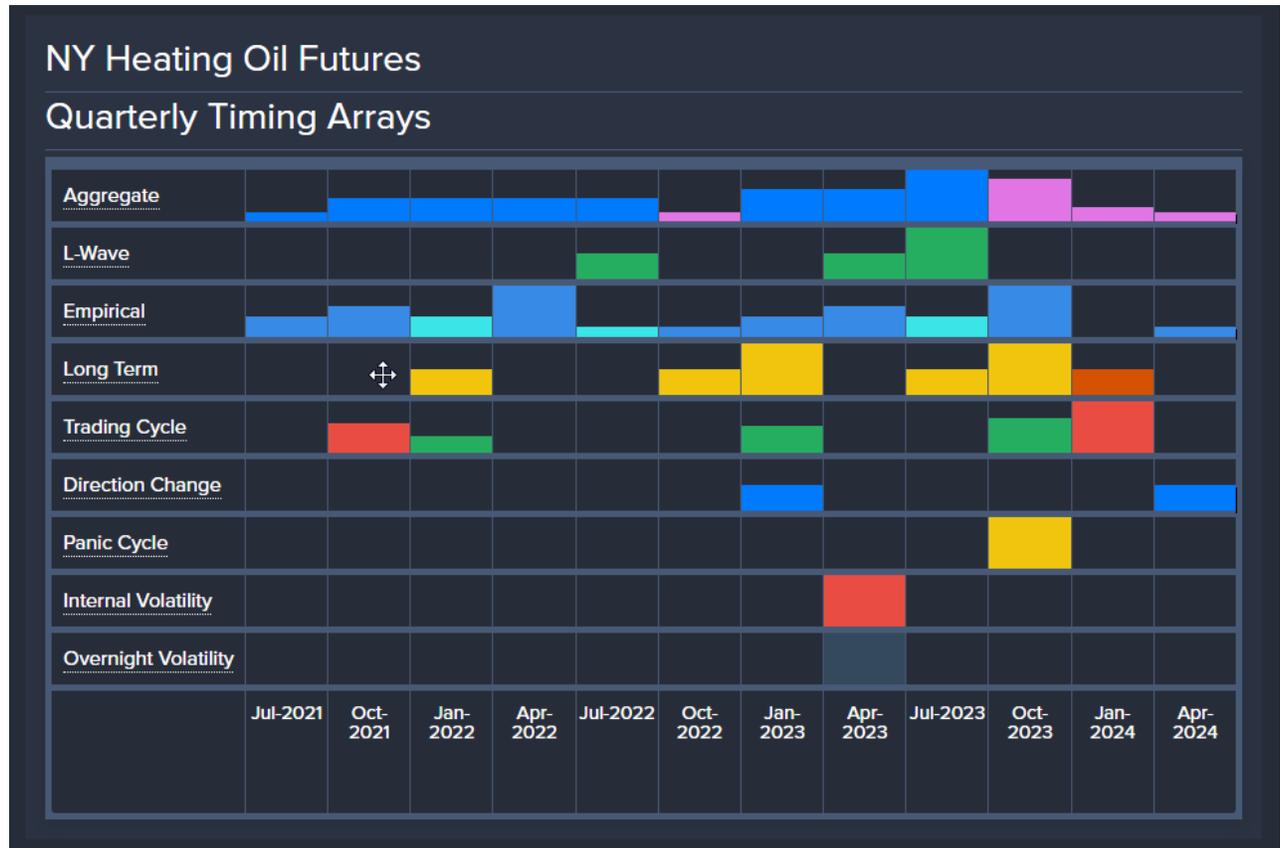
3% | 2023/01/01
5% | 2025/01/01
8% | 2028/01/01
13% | 2033/01/01
21% | 2041/01/01
34% | 2054/01/01
55% | 2075/01/01
89% | 2109/01/01
144% | 2164/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

Here in NY Heating Oil Futures, we do find that this particular market has correlated with our Economic Confidence Model in the past. The Last turning point on the ECM cycle low to line up with this market was 2020 and 2009 and 1994. The Last turning point on the ECM cycle high to line up with this market was 2018 and 2011 and 1996.

YEARLY CURRENCY CORRELATION

In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 0 implying that this immediate rally is purely in domestic terms.



QUARTERLY ANALYSIS PERSPECTIVE

HEDGING MODEL

Employing our Quarterly Hedging Model using our Reversal System only, we are currently long since during the First Quarter 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 8551. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

NY HEATING OIL FUTURES

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Quarterly Level, with respect to time, there was a prospect of a high forming this the Third Quarter 2021 given it is a potential turning point and we have exceeded the previous quarter's high. However, we are still trading above last quarter's settlement. To date, this have been a 6-quarter rally from the last low of the Second Quarter 2020. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Third Quarter 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting the Third Quarter 2022 until the Fourth Quarter 2022 with each target producing the opposite direction for that 2-quarter period.

Keep in mind that given the significant decline of 22% from the last high established the Fourth Quarter 2018, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 4 Bearish Reversals from the last high thus far to date. We have Quarterly Directional Change targets due the First Quarter 2023 and the Second Quarter 2024. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY CURRENCY CORRELATION

The NY Heating Oil Futures did make a high in conjunction with the British pound on 01/01 yet in nominal terms the last high was created on 10/01 whereas the high in Australian dollar took place on 01/01, a high in the Canadian dollar was established on 01/01, a high in the Japanese yen was established on 01/01, a high in the Swiss franc was established on 01/01, a high in the Euro was established on 01/01, and a high in the Chinese yuan was 01/01.

NY HEATING OIL FUTURES

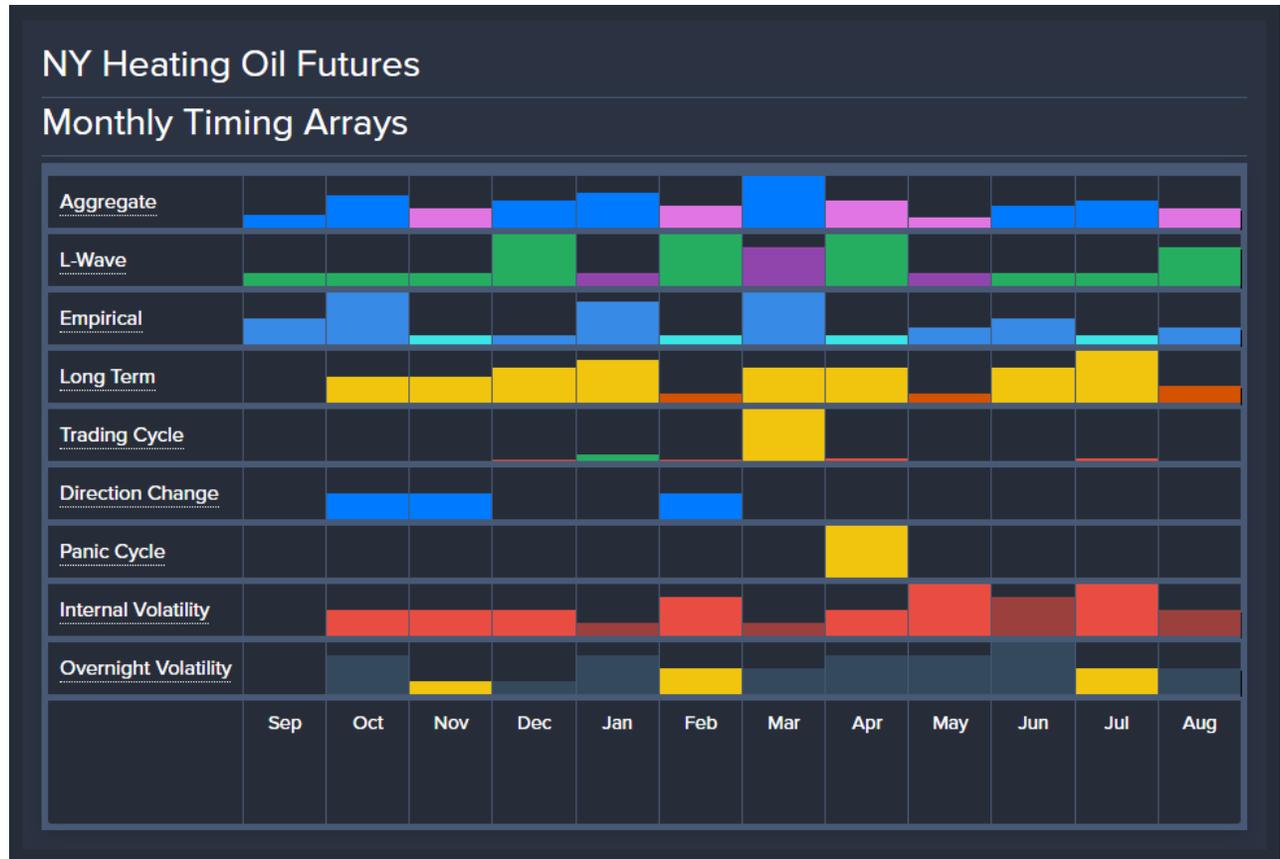
In terms of a Basket of Currencies, we see that here this market has been neutral while in nominal terms, it has declined. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 10/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.



MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

On a broader perspective, this market remains in an uptrend posture on all our indicators looking at the monthly level. We see here the trend has been moving up for the past 17 months. The previous low of 6731 made during April 2020 on the Monthly level has held and only a break of 18992 on a closing basis would warn of a technical near-term change in trend. The previous high made during September on the Monthly level at 23650 has now been exceeded in the recent rally. We have generated a buy signal so some caution is required.



MONTHLY TURNING POINTS

Centering on time, I do see a prospective target on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for October, January 2022 and March 2022, July 2022. Centering on the patterns unfolding, I do see a prospect of a rally moving into October with the opposite trend thereafter into January 2022. If the October high holds, then a decline into the next turning point may materialize. Otherwise, a rally into the next target should be expected if we make new highs.

MONTHLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2030 and during 2031. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

MONTHLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2028. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Nonetheless, our Panic Cycle target, for the next period to watch is during 2022. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BULLISH REVERSALS

The key Monthly Bullish Reversal stands overhead at 24497. If this market rallies on a monthly closing basis above this level, then a breakout becomes possible. If we exceed that Reversal, then the next key resistance level to watch will be the next Monthly Bullish Reversal at 23649.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 20385. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 17316.

MONTHLY ANALYSIS PERSPECTIVE

Factually, we have exceeded last month's high so we have therefore generated a new What If Monthly Bearish Reversal which lies below the present trading level at the general area of 19655 and a month end closing beneath this level will be a sell signal for now.

HEDGING MODEL

Employing our Monthly Hedging Model using our Reversal System only, we are currently long since May on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 20385. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

NY HEATING OIL FUTURES

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Monthly Level, with respect to time, there is a prospect of a rally moving into October with the opposite trend implied thereafter into November (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is March 2022 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting September until November, but we do have a key target arriving also on October with each target producing the opposite direction for that 3-month period. Thereafter, we see the next target coming into play as January 2022 until March 2022 with again each target producing the opposite direction for that 3-month period.

However, the important target during that period will be March 2022. Still, when we look at the next higher time level, we see that a high formed during Quarterly. We have a Monthly Directional Change target due in February 2022. This lines up with a turning point so in this case we can see at least an intraday event, or a turning point based on the close. Our volatility models also target this date as well. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

Monthly Level

<u>Indicator Description...</u>	<u>Trend</u>
Immediate Trend	BULLISH
Short-Term Momentum	BULLISH
Short-Term Trend	BULLISH
Intermediate Momentum	BULLISH
Intermediate Trend	BULLISH
Long-Term Trend	BULLISH
Cyclical Strength.....	BULLISH
Broader Trend	BULLISH
Long-Term Cyclical Trend ..	BULLISH

MONTHLY CURRENCY CORRELATION

The NY Heating Oil Futures did make a high in conjunction with the British pound on 07/01 yet in nominal terms the last high was created on 09/01 whereas the high in Australian dollar took place on 07/01, a high in the Canadian dollar was established on 07/01, a high in the Japanese yen was established on 07/01, a high in the Swiss franc was established on 07/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 07/01.

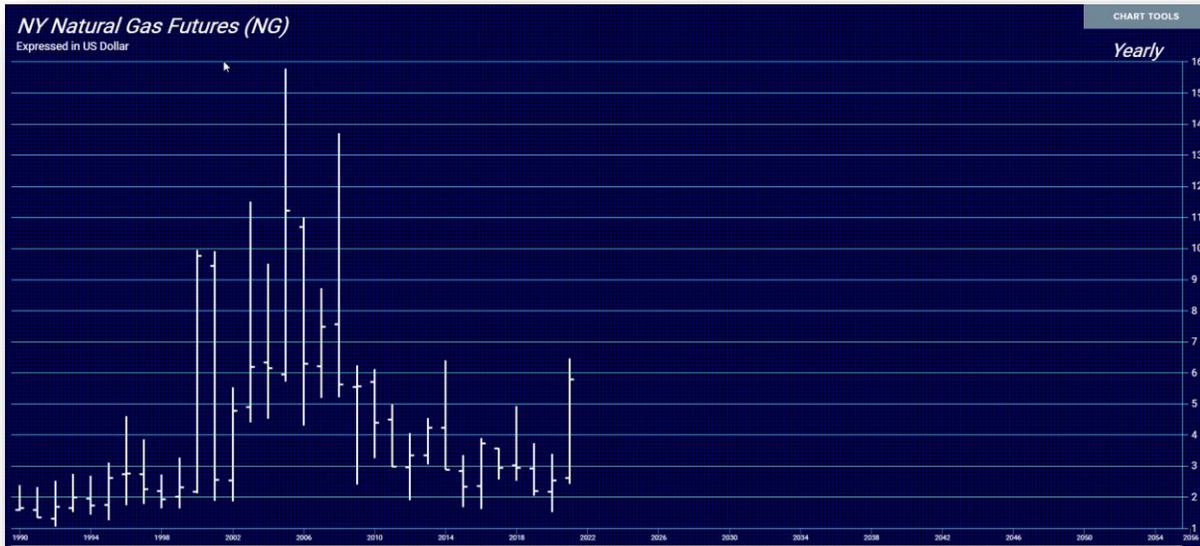
In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 09/01 after the high in terms of a basket of currencies which came on 07/01 implying that this immediate rally is purely in domestic terms.

MARKET RISK FACTOR

NY Heating Oil Futures Risk Table

	----- UPSIDE RISK -----		----- DOWNSIDE RISK -----	
MONTHLY.....	24497	2.811%	20385	14.44%
QUARTERLY.....	24497	2.811%	8551	64.11%
YEARLY.....	25425	6.706%	11140	53.24%

NYMEX NATURAL GAS HENRY HUB



The major high took place during 2005 that was 15 years ago. On the Yearly Level, looking at our cyclical timing models, there was a reasonable potential of a temporary low since the market is trading at 5619 above the previous Yearly closing 2422. Maintaining a closing above our Momentum Projection residing at 3672 will signal that the market is finding strength right now. However, a higher closing would still leave the last low as a key target and the next turning point will be 2021. Yet, this market is also trading above our momentum resistance at 3339, which is providing support right now on a closing basis. This turning point 2020 also matched the turning point on the Economic Confidence Model implying it was significant (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting 2020 until 2021 with each target producing the opposite direction for that 2-year period. Thereafter, we see the next target coming into play as 2025 until 2028 with again each target producing the opposite direction for that 4-year period.

NYMEX NATURAL GAS HENRY HUB

However, the important target during that period will be 2028.

Keep in mind that given the dramatic decline of 69% from the last high established during 2018, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 1 Bearish Reversal from the last high thus far to date.

The NYMEX Natural Gas Henry Hub has continued to make new historical highs over the course of the rally from 2020 moving into 2021. Distinctly, we have not elected any Bullish Reversals to date.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, ever since the low of 1992, there have been 3 major lows with each being higher than the previous which is indicative of a protracted long-term bull market. The last major low was established back in 2020 with the high forming during 2005. This decline has thus been 15 years. We have exceeded the previous high of 2020, which was 3396 implying we may have at least a temporary low in place for now and we have not exceeded the previous major high of 15780. Distinctly, we have not elected any Yearly Bearish Reversal to date from the turning point of 2005.

The last major low took place during 2020 which was last year.

YEARLY ANALYSIS PERSPECTIVE

On the yearly level in NYMEX Natural Gas Henry Hub, the last important low was established during 2020 at 1517, which was down 2 years from the high made back during 2018 at 4929. This market came to test the Yearly Bearish Reversal at 1901 bottoming at 1517 but failed to close below it. However, the highest closing was during 2017 at 2953 whereas the intraday high formed in 2018.

Right now, as stated, the market is trading above last year's high of 3396. Overall, the market has been in a long-term bearish trend. Right now, the market is trading bullish above our yearly momentum indicators warning that support begins down at 4929.

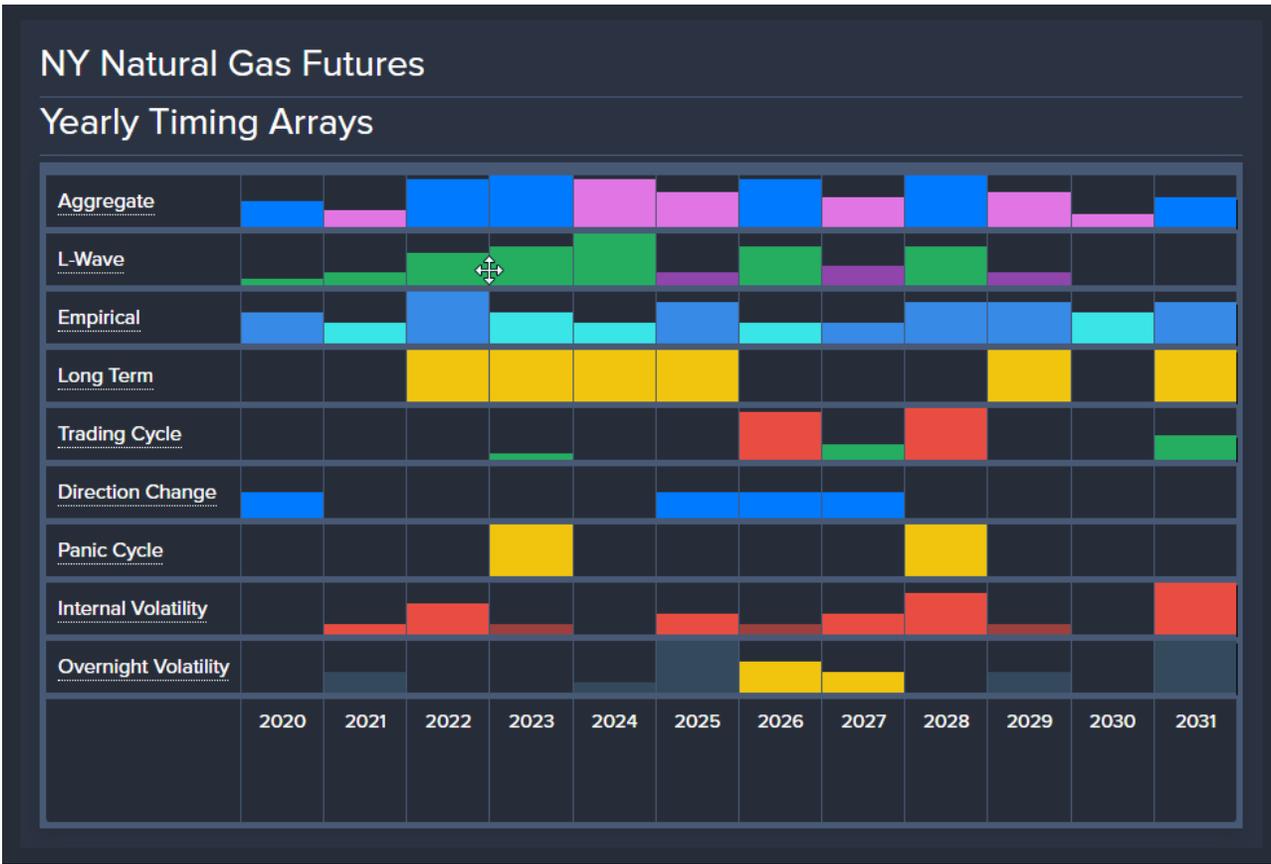
Examining the yearly time level, we can now see that there is a 11% risk on the upside, where we show a clear downside risk factor at 66%. From a risk

NYMEX NARURAL GAS HENRY HUB

perspective, resistance on a closing basis stands at 6241 whereas the risk on the downside begins at 1901.

YEARLY TECHNICAL ANALYSIS

2021/01/01...	385	3026	4655	8174	11987
2022/01/01...	216	3094	3960	9255	12785
2023/01/01...	48	3163	3264	10337	13583
2024/01/01...	3231	2569	11419	14382	
2025/01/01...	3300	1874	12500	15180	
2026/01/01...	3368	1178	13582	15978	
2027/01/01...	3436	483	14664	16776	



YEARLY TIMING ANALYSIS

Probing into the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2023, 2026, 2028 and

2031. Centering on the patterns unfolding, we do see a prospect of a decline moving into 2023 with the opposite trend thereafter into 2026. This pattern becomes a possibility if the market closed back below last year's high of 1517 at a minimum. Closing this year above last year's high warns that a cycle inversion is possible with a rally into the next target.

YEARLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2025, during 2026 and during 2027. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2031. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Nonetheless, our Panic Cycle targets for the period ahead to watch are during 2023 and during 2028. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Discernably, the far-reaching forecast in NYMEX Natural Gas Henry Hub remains positive since we are trading above last year's high. Presently, we have made a reaction low in 2020 which was a 15-year decline. Since that reaction low of 2020, this market has bounced for the last year with this year exceeding last year's high. Historically, this market experienced a Phase Transition from the low of 1990 to the high of 2005 which amounted to about a 800% advance. To date,

NYMEX NATURAL GAS HENRY HUB

this market has not breached any long-term support which begins at 1849 on an annual closing basis. Meanwhile, we have also not breached any long-term resistance which begins at 3903. Nonetheless, we are currently trading above this level.

INDICATING RANGE STUDY

Focusing on our perspective using the indicating ranges on the Yearly level in the NYMEX Natural Gas Henry Hub, this market remains moderately bearish position at this time with the overhead resistance beginning at 2568 and support forming below at 1740. The market is trading closer to the resistance level at this time.

Yearly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum bearish
Short-Term Trend bearish
Intermediate Momentum neutral
Intermedia Trend bearish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE

Last Close Was. 2422

Envelope Top... 4316
Internal AvgL.. 2051
Internal AvgH.. 4181
Envelope Btm... 2702

STOCHASTICS

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2006 whereas the actual market high in price unfolded back in 2005. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow.

REVERSAL COMMENTARY

Utilizing our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 6318. These Tentative Hypothetical Bearish Reversals would rest at 1611, 1640, 2030, and 3255, whereas a close below the previous low 1517 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2020 LOW:

Sun. 01/01/2023
Wed. 01/01/2025
Sat. 01/01/2028
Sat. 01/01/2033
Tue. 01/01/2041
Thu. 01/01/2054
Tue. 01/01/2075
Wed. 01/01/2109
Mon. 01/01/2164

NYMEX NARURAL GAS HENRY HUB

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous LOW at 1517

23% | 1875
38% | 2096
61% | 2455
78% | 2709

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/01/01
5% | 2025/01/01
8% | 2028/01/01
13% | 2033/01/01
21% | 2041/01/01
34% | 2054/01/01
55% | 2075/01/01
89% | 2109/01/01
144% | 2164/01/01

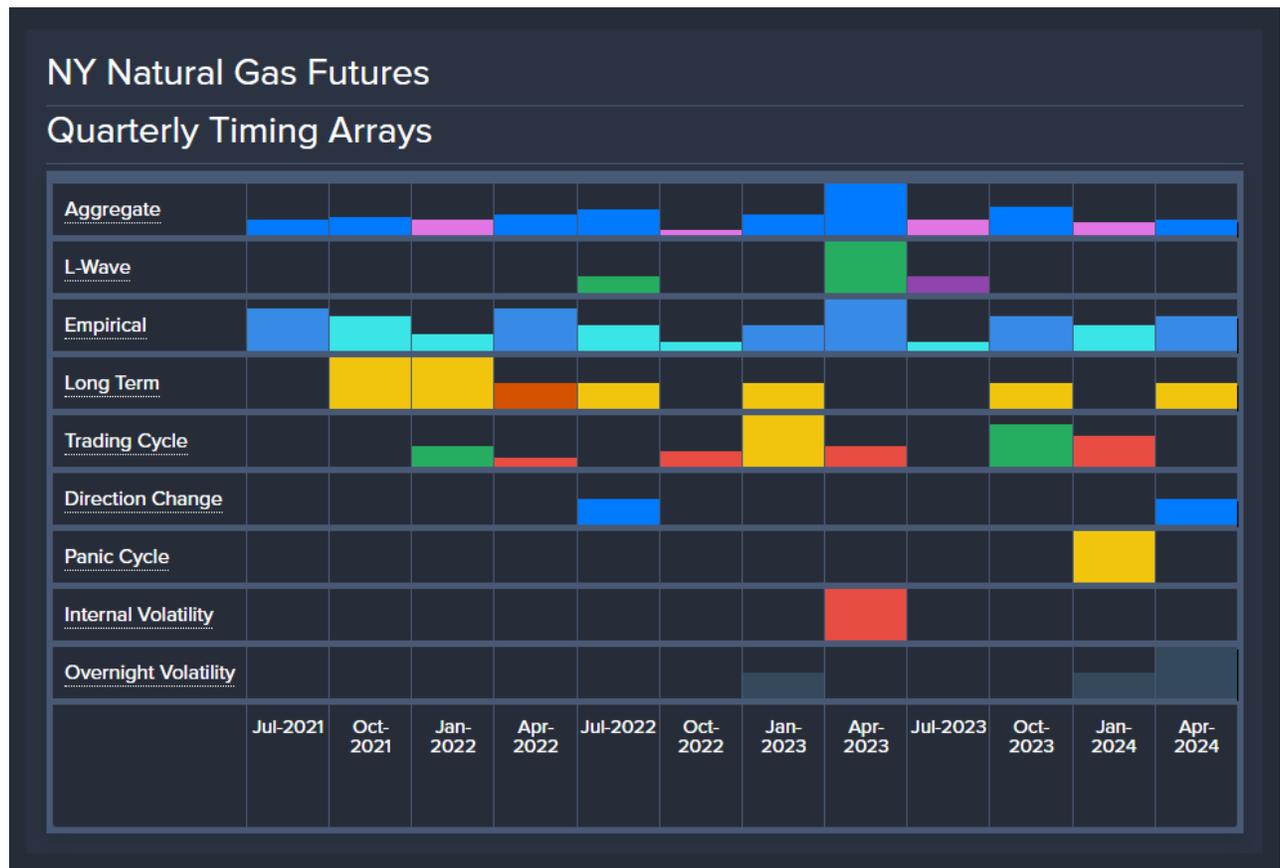
ECONOMIC CONFIDENCE MODEL CORRELATION

Here in NYMEX Natural Gas Henry Hub, we do find that this particular market has correlated with our Economic Confidence Model in the past. The Last turning point on the ECM cycle low to line up with this market was 2020 and 2002. The Last turning point on the ECM cycle high to line up with this market was 2018 and 2005 and 2000 and 1996.

YEARLY CURRENCY CORRELATION

The NYMEX Natural Gas Henry Hub did make a high in conjunction with the British pound on 0 yet in nominal terms the last high was created on 01/01 whereas the high in Australian dollar took place on 0, a high in the Canadian dollar was established on 0, a high in the Japanese yen was established on 0, a high in the Swiss franc was established on 0, a high in the Euro was established on 0, and a high in the Chinese yuan was 0.

In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 0 implying that this immediate rally is purely in domestic terms.



QUARTERLY ANALYSIS PERSPECTIVE

HEDGING MODEL

Employing our Quarterly Hedging Model using our Reversal System only, we are currently long since during the Second Quarter 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 2684. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2021 with the opposite trend implied thereafter into the First Quarter 2022 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Second Quarter 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting the Third Quarter 2021 until the First Quarter 2022, but we do have a key target arriving also on the Fourth Quarter 2021 with each target producing the opposite direction for that 3-quarter period. Thereafter, we see the next target coming into play as the Third Quarter 2022 until the Fourth Quarter 2022 with again each target producing the opposite direction for that 2-quarter period. We have overall 2 Quarterly Directional Change targets ahead and 1 that also aligns with a main turning points on the top line of the Array. Therefore, the target of the Third Quarter 2022 should be an important target. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. We also see a convergence in the Array with both the Directional Change and Panic Cycle lining up for the same target of the Second Quarter 2024. This accentuates the importance of this target as an event on the horizon. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY CURRENCY CORRELATION

The NYMEX Natural Gas Henry Hub did make a high in conjunction with the British pound on 01/01 yet in nominal terms the last high was created on 07/01

NYMEX NATURAL GAS HENRY HUB

whereas the high in Australian dollar took place on 01/01, a high in the Canadian dollar was established on 01/01, a high in the Japanese yen was established on 01/01, a high in the Swiss franc was established on 01/01, a high in the Euro was established on 01/01, and a high in the Chinese yuan was 01/01.

In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 07/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.

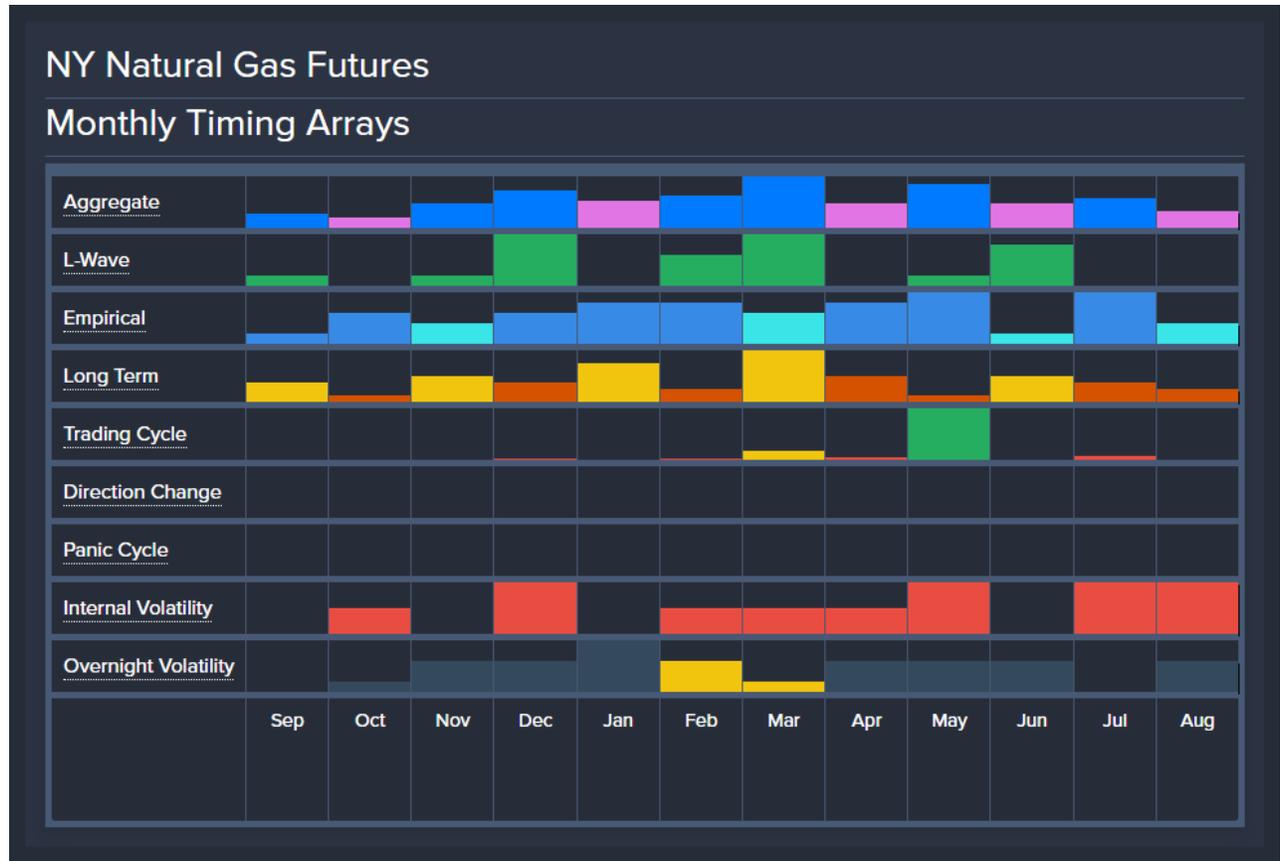


MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

On a broader perspective, this market remains in an uptrend posture on all our indicators looking at the monthly level. We see here the trend has been moving up for the past 15 months. The previous low of 1517 made during June 2020 on the Monthly level has held and only a break of 3734 on a closing basis would warn of a technical near-term change in trend. The previous high made during September on the Monthly level at 6318 remains significant technically and only

exceeding that level on a closing basis would suggest a reversal in the immediate trend. We have generated a buy signal so some caution is required.



MONTHLY TURNING POINTS

Centering on time, I do see a prospective target on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for December, March 2022 and May 2022, July 2022. Centering on the patterns unfolding, I do see a prospect of a decline moving into December with the opposite trend thereafter into March 2022. Looking ahead at December, a continued advance becomes possible if this month’s high is penetrated intraday.

MONTHLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2025, during 2026 and during 2027. This model often picks the high or low

but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

MONTHLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2031. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Nonetheless, our Panic Cycle targets for the period ahead to watch are during 2023 and during 2028. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BULLISH REVERSALS

The key Monthly Bullish Reversal stands overhead at 6401. If this market rallies on a monthly closing basis above this level, then a breakout becomes possible. If we exceed that Reversal, then the next key resistance level to watch will be the next Monthly Bullish Reversal at 8321.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal is well below the market resting at 3009. This is where we would define a further bear market trend unfolding if this were to be breached on a monthly closing basis. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 2421.

HEDGING MODEL

Employing our Monthly Hedging Model using our Reversal System only, we are currently long since December 2020 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 3009. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

NYMEX NARURAL GAS HENRY HUB

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Monthly Level, looking at our cyclical timing models, there was a reasonable potential of a rally moving into the next target of September with the opposite trend implied thereafter into December (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is March 2022 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting March 2022 until May 2022 with each target producing the opposite direction for that 3-month period.

Monthly Level

Indicator Description... Trend

Immediate Trend	BULLISH
Short-Term Momentum	BULLISH
Short-Term Trend	BULLISH
Intermediate Momentum	BULLISH
Intermediate Trend	BULLISH
Long-Term Trend	BULLISH
Cyclical Strength.....	BULLISH
Broader Trend	BULLISH
Long-Term Cyclical Trend ..	BULLISH

MONTHLY CURRENCY CORRELATION

The NYMEX Natural Gas Henry Hub did make a high in conjunction with the British pound on 07/01 yet in nominal terms the last high was created on 09/01 whereas the high in Australian dollar took place on 07/01, a high in the Canadian dollar was established on 07/01, a high in the Japanese yen was established on 07/01, a high in the Swiss franc was established on 07/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 07/01.

NYMEX NARURAL GAS HENRY HUB

In terms of a Basket of Currencies, we see that here this market has been neutral while in nominal terms, it has declined. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 09/01 after the high in terms of a basket of currencies which came on 07/01 implying that this immediate rally is purely in domestic terms.

MARKET RISK FACTOR

NYMEX Natural Gas Henry Hub Risk Table

	----- UPSIDE RISK -----		----- DOWNSIDE RISK -----	
MONTHLY.....	6241	11.06%	3009	46.44%
QUARTERLY.....	6241	11.06%	2684	52.23%
YEARLY.....	6241	11.06%	1901	66.16%

London IPE Brent Crude Cash



This market made a bull run from the low of 948 made in 1998 for 10 years into a high established in 2008 at 15055. Since that high, this market has declined for 12 years prior to this year. At this point in time, we have made a low last year at 1690. However, the major low since that high took place in 2020 at 1690. Presently, this market has rallied exceeding last year's high of 7469 reaching 7983 while holding last year's low of 1690. The major high took place during 2008 that was 12 years ago, which was a perfect 12-year panic cycle. On the Yearly Level, considering all timing factors, there is a possibility of a temporary low since the market is trading at 7849 above the previous Yearly closing 4761. A closing below our Momentum Projection residing at 8415 will signal that the market is still weak, but a close above means we could see a reactionary bounce back possibly into the next turning point due in 2022 leaving 2021 as a temporary low. (NOTE: this can be intraday or on a closing basis).

London IPE Brent Crude Cash

The strongest target in the Yearly array is 2028 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting 2020 until 2023, but we do have a key target arriving also this year here in 2021 with each target producing the opposite direction for that 4-year period. Thereafter, we see the next target coming into play as 2028 until 2030 with again each target producing the opposite direction for that 3-year period.

However, the important target during that period will be 2030, yet the key target will be 2028.

Keep in mind that given the dramatic decline of 80% from the last high established during 2018, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 1 Bearish Reversal from the last high thus far to date. We have a Yearly Directional Change target due in 2021. This lines up with a turning point so in this case we can see at least an intraday event, or a turning point based on the close. Our volatility models also target this date as well. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

The historical broader tone of the London IPE Brent Crude Cash has been a bearish consolidation following the high established back in 2008. Since then, this market has created 2 reaction highs which have been unable to break this overall protracted bearish consolidating trend. Still, the major low was made in 2020 and the market has bounced back for the last year. The last Yearly Reversal to be elected was a Bearish at the close of 2020.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, ever since the low of 1998, there have been 2 major lows with each being higher than the previous which is indicative of a protracted long-term bull market. The last major low was established back in 2020 with the high forming during 2008. This decline has thus been 12 years so from a timing perspective, this may be a panic cycle low and caution is warranted. We have exceeded the previous high of 2020, which was 7469 implying we may have at least a temporary low in place for now and we have not exceeded the previous major high of 15055. Distinctly, we have not elected any Yearly Bearish Reversal to date from the turning point of 2008.

London IPE Brent Crude Cash

The last major low took place during 2020 which was last year. The last near-term low took place just 2020 and the previous major high was 2008 which was 15055. This raises the potential that last year's low is a major low. A closing above last year's high of 7469 will tend to confirm that low should hold for now.

YEARLY ANALYSIS PERSPECTIVE

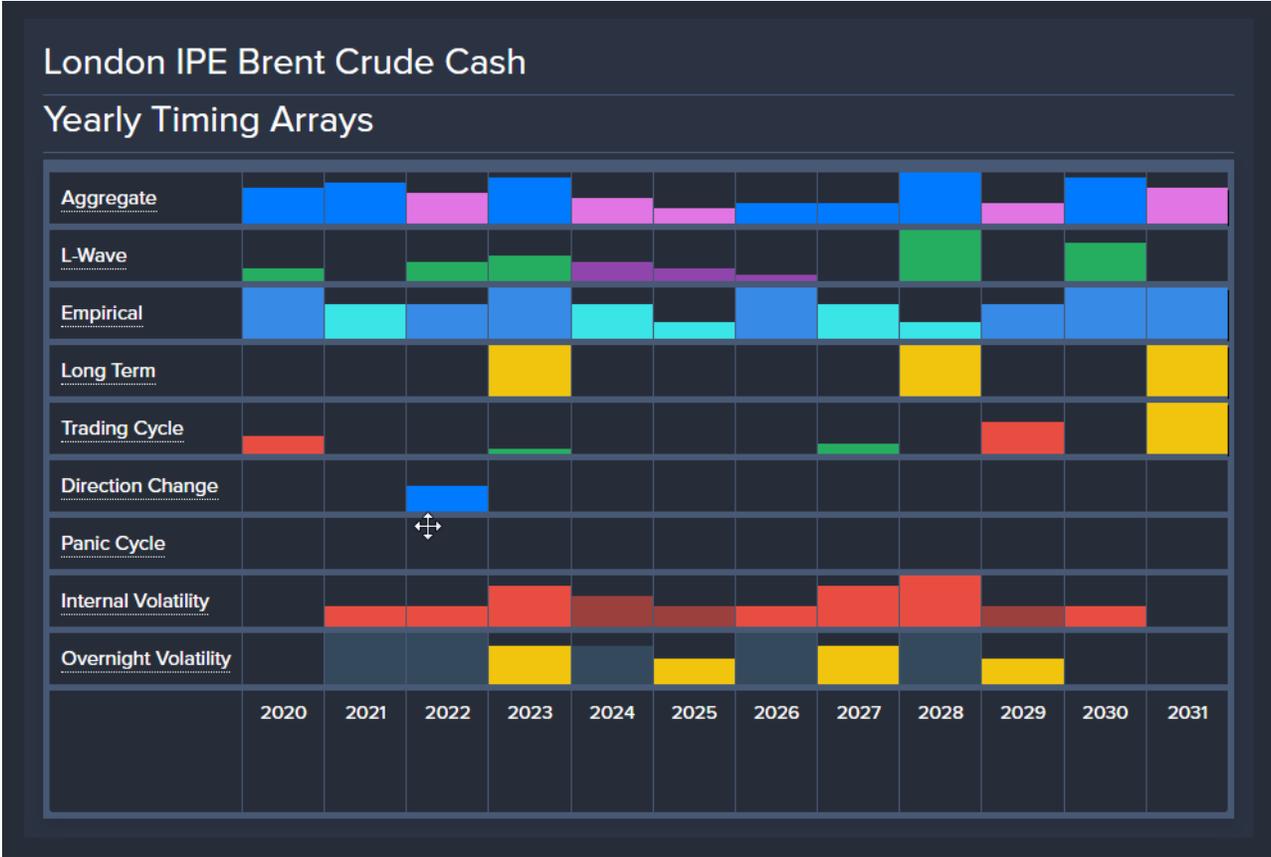
On the yearly level in London IPE Brent Crude Cash, the last important low was established during 2020 at 1690, which was down 2 years from the high made back during 2018 at 8635. This market came to test the Yearly Bearish Reversal at 3750 bottoming at 1690 but failed to close below it. However, the highest closing was during 2017 at 6349 whereas the intraday high formed in 2018.

Right now, as stated, the market is trading above last year's high of 7469. Overall, the market has been in a long-term bearish trend.

Examining the yearly time level, we can now see that there is a 21% risk on the upside, where we show a clear downside risk factor at 52%. From a risk perspective, resistance on a closing basis stands at 9550 whereas the risk on the downside begins at 3750.

YEARLY TECHNICAL ANALYSIS

2021/01/01...	2504	6443	7485
2022/01/01...	2450	6693	6903
2023/01/01...	2396	6942	6320
2024/01/01...	2342	7191	5738
2025/01/01...	2289	7440	5156
2026/01/01...	2235	7690	4573
2027/01/01...	2181	7939	3991



YEARLY TIMING ANALYSIS

Probing into the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2021, 2023, 2028 and 2030. Centering on the patterns unfolding, we do see a prospect of a rally moving into 2021 with the opposite trend thereafter into 2023.

YEARLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model target is during 2021. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2028. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

THE BROADER LONGER-TERM VIEW

Discernably, the far-reaching outlook in London IPE Brent Crude Cash remains positive since we are trading above last year's high. Presently, we have made a reaction low in 2020 which was a 12-year decline. Since that reaction low of 2020, this market has bounced for the last year with this year exceeding last year's high. Historically, this market experienced a Phase Transition from the low of 1988 to the high of 2008 which amounted to about a 900% advance. To date, this market has not breached any long-term support which begins at 2760 on an annual closing basis.

INDICATING RANGE STUDY

Focusing on our perspective using the indicating ranges on the Yearly level in the London IPE Brent Crude Cash, this market remains neutral with resistance standing at 5581 and support forming below at 4630. The market is trading closer to the support level at this time.

Yearly Indicating Ranges

Immediate Trend bearish
Short-Term Momentum neutral
Short-Term Trend bearish
Intermediate Momentum neutral
Intermedia Trend neutral
Long-Term Trend bullish
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE

Last Close Was. 4761
Envelope Top... 8732
Internal AvgL.. 3854
Internal AvgH.. 7770
Envelope Btm... 5466

STOCHASTICS

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2018 whereas the actual market high in price unfolded back in 2008. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow.

REVERSAL COMMENTARY

Utilizing our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 7983. These Tentative Hypothetical Bearish Reversals would rest at 948, 2546, 4988, and 6703, whereas a close below the previous low 1690 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2020 LOW:

Sun. 01/01/2023

Wed. 01/01/2025

Sat. 01/01/2028

Sat. 01/01/2033

Tue. 01/01/2041

London IPE Brent Crude Cash

Thu. 01/01/2054

Tue. 01/01/2075

Wed. 01/01/2109

Mon. 01/01/2164

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous LOW at 1690

23% | 2089

38% | 2336

61% | 2734

78% | 3018

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/01/01

5% | 2025/01/01

8% | 2028/01/01

13% | 2033/01/01

21% | 2041/01/01

34% | 2054/01/01

55% | 2075/01/01

89% | 2109/01/01

144% | 2164/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

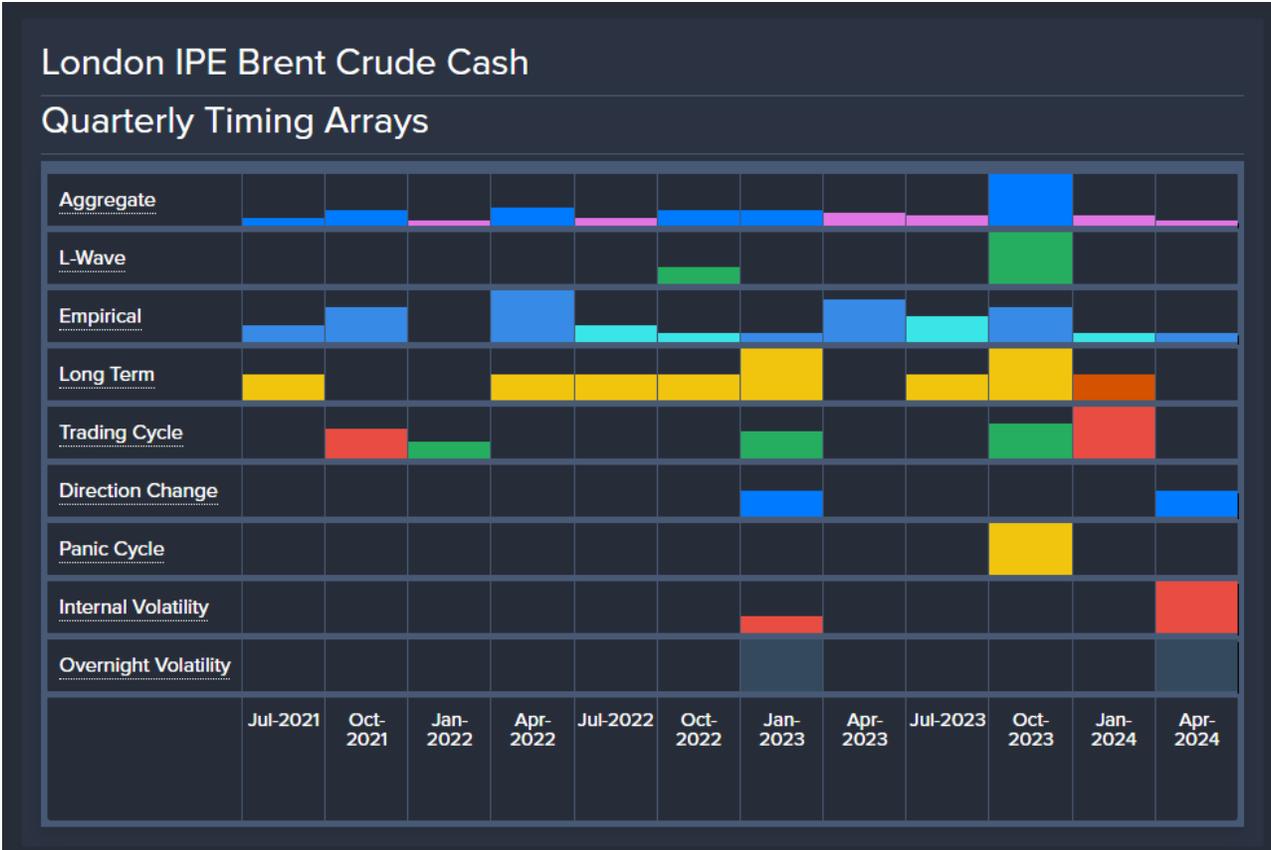
Here in London IPE Brent Crude Cash, we do find that this particular market has correlated with our Economic Confidence Model in the past. The Last turning point on the ECM cycle low to line up with this market was 2020 and 2001 and

London IPE Brent Crude Cash

1998 and 1994. The Last turning point on the ECM cycle high to line up with this market was 2018 and 2000.

YEARLY CURRENCY CORRELATION

In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 0 implying that this immediate rally is purely in domestic terms.



QUARTERLY ANALYSIS PERSPECTIVE

HEDGING MODEL

Employing our Quarterly Hedging Model using our Reversal System only, we are currently long since during the First Quarter 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 7200. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2021 with the opposite trend implied thereafter into the First Quarter 2022 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Fourth Quarter 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting the Third Quarter 2021 until the Third Quarter 2022, but we do have a key target arriving also on the Second Quarter 2022 with each target producing the opposite direction for that 5-quarter period. Thereafter, we see the next target coming into play as the Third Quarter 2023 until the Fourth Quarter 2023 with again each target producing the opposite direction for that 2-quarter period.

However, the important target during that period will be the Fourth Quarter 2023. Still, when we look at the next higher time level, we see that a high formed during Yearly.

Keep in mind that given the sharp decline of 17% from the last high established the Third Quarter 2021, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Quarterly Bearish Reversal comes into play at 7200. We have Quarterly Directional Change targets due the First Quarter 2023 and the First Quarter 2024. We also see a convergence in the Array with both the Directional Change and

London IPE Brent Crude Cash

Panic Cycle lining up for the same target of the First Quarter 2024. This accentuates the importance of this target as an event on the horizon. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY CURRENCY CORRELATION

The London IPE Brent Crude Cash did make a high in conjunction with the British pound on 01/01 yet in nominal terms the last high was created on 10/01 whereas the high in Australian dollar took place on 01/01, a high in the Canadian dollar was established on 01/01, a high in the Japanese yen was established on 01/01, a high in the Swiss franc was established on 01/01, a high in the Euro was established on 01/01, and a high in the Chinese yuan was 01/01.

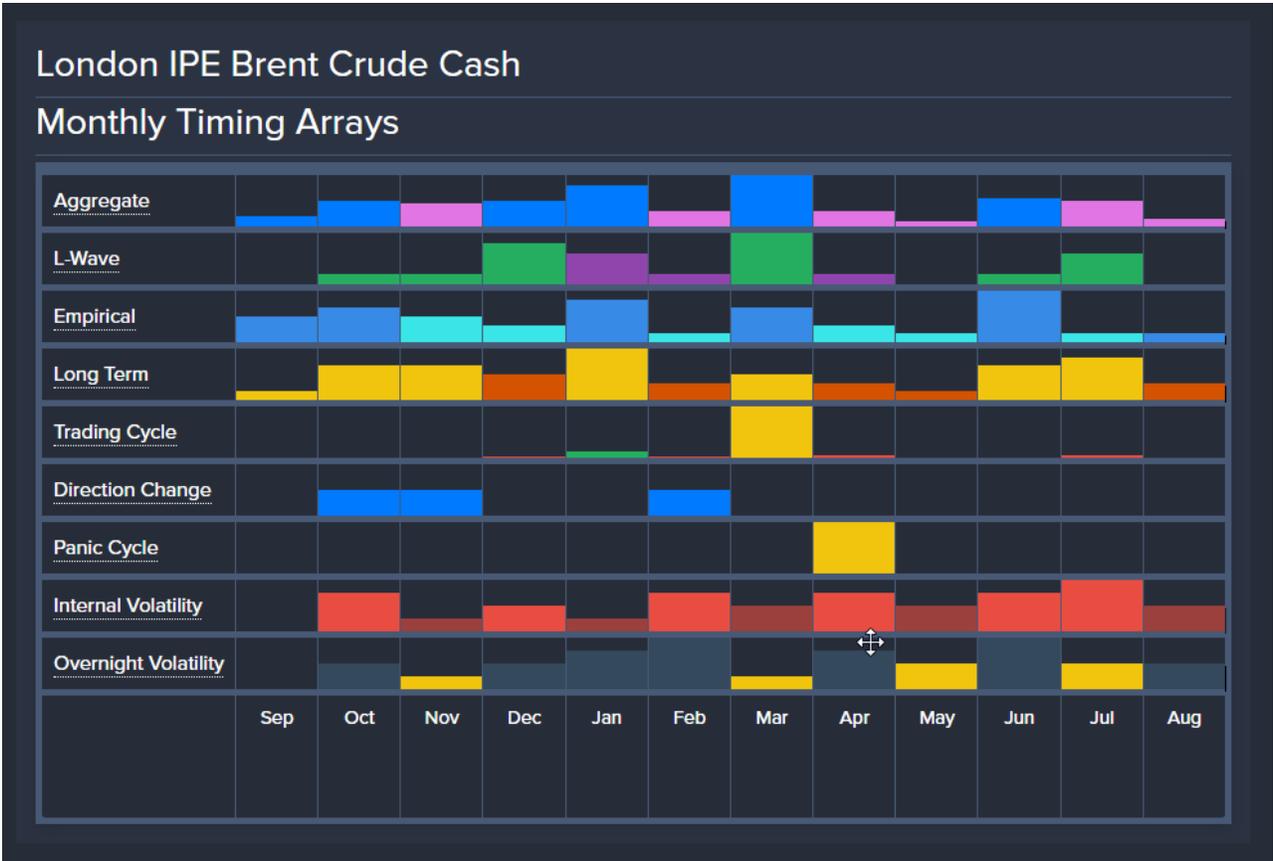
In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 10/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.



MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

On a broader perspective, this market remains in an uptrend posture on all our indicators looking at the monthly level. We see here the trend has been moving up for the past 17 months. The previous low of 1690 made during April 2020 on the Monthly level has held and only a break of 7214 on a closing basis would warn of a technical near-term change in trend. The previous high made during July on the Monthly level at 7983 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. We have generated a buy signal so some caution is required.



MONTHLY TURNING POINTS

Centering on time, I do see a prospective target on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for January 2022 and March 2022, June 2022. Centering on the patterns unfolding, I do see a prospect of a rally moving into January 2022 with the opposite trend thereafter into March

2022. Looking ahead at January 2022, a continued advance becomes possible if this month's high is penetrated intraday.

MONTHLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model target is during 2021. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

MONTHLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2028. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY BULLISH REVERSALS

The key Monthly Bullish Reversal stands overhead at 7990. If this market rallies on a monthly closing basis above this level, then a breakout becomes possible. If we exceed that Reversal, then the next key resistance level to watch will be the next Monthly Bullish Reversal at 7900.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 6080. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 4820.

MONTHLY ANALYSIS PERSPECTIVE

Factually, we have exceeded last month's high so we have therefore generated a new What If Monthly Bearish Reversal which lies below the present trading level at the general area of 7151 and a month end closing beneath this level will be a sell signal for now.

HEDGING MODEL

Employing our Monthly Hedging Model using our Reversal System only, we are currently long since July on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 6080. If you

want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

On the Monthly Level, considering all timing factors, there was a possibility of a rally moving into the next target of September yet since this market has exceeded the September high, then a further rally is possible into the next target of January 2022 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is March 2022 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting January 2022 until March 2022 with each target producing the opposite direction for that 3-month period.

Keep in mind that given the sharp decline of 11% from the last high established July, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Monthly Bearish Reversal comes into play at 6080. We have overall 2 Monthly Directional Change targets ahead and 1 that also aligns with a main turning points on the top line of the Array. Therefore, the target of March 2022 should be an important target. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

Monthly Level

<u>Indicator Description...</u>	<u>Trend</u>
Immediate Trend	- Neutral -
Short-Term Momentum	BULLISH
Short-Term Trend	BULLISH
Intermediate Momentum	BULLISH
Intermediate Trend	BULLISH
Long-Term Trend	BULLISH

London IPE Brent Crude Cash

Cyclical Strength..... BULLISH
Broader Trend (Bearish)
Long-Term Cyclical Trend .. BULLISH

MONTHLY CURRENCY CORRELATION

The London IPE Brent Crude Cash did make a high in conjunction with the British pound on 07/01 yet in nominal terms the last high was created on 07/01 whereas the high in Australian dollar took place on 07/01, a high in the Canadian dollar was established on 07/01, a high in the Japanese yen was established on 07/01, a high in the Swiss franc was established on 07/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 07/01.

In terms of a Basket of Currencies, we see that here this market has been neutral while in nominal terms, it has declined. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 07/01 after the high in terms of a basket of currencies which came on 07/01 implying that this immediate rally is purely in domestic terms.

MARKET RISK FACTOR

London IPE Brent Crude Cash Risk Table

----- UPSIDE RISK ----- DOWNSIDE RISK ----

MONTHLY.....	7900 0.649% 6080 22.53%
QUARTERLY.....	8030 2.306% 7200 8.268%
YEARLY.....	9550 21.67% 3750 52.22%