# Ethanol DA – Aff Answers

## Non-Unique

#### Despite other uncertainties, the ethanol industry will do well

WSJ 7/23 (Wall Street Journal, “3rd Global Ethanol Focus 2012, Be Part of Your Ethanol Business”, Market Watch, 7/23/12, http://www.marketwatch.com/story/3rd-global-ethanol-focus-2012-be-part-of-your-ethanol-business-2012-07-23)

SHANGHAI, Jul 23, 2012 (BUSINESS WIRE) -- The 3rd Global Ethanol Focus 2012 (GEF2012), focusing on the Asian and global ethanol market, will be held at Millennium Hilton Bangkok, Thailand on September 19-20. ¶ The conference will cover supply situations in Brazil, US, Thailand, Vietnam and Pakistan, as well as ethanol demand in industry, beverage and fuel sectors. In addition, new ethanol technologies and their commercialization will be discussed, including coal-based ethanol, steel gas-based ethanol and cellulosic ethanol. ¶ It is expected that over 80 participants from all over the world will attend the conference, with 50% of them being ethanol producers, 24% international traders, 11% downstream users, 5% technical advisors, 4% government officers and 6% consultants & associations. ¶ As a platform to promote Asian and global ethanol business exchange, GEF provides an effective means of information sharing, networking, communication and business cooperation to all members in matters of general and specific interests. Beginning its activities in China in 2006 with the GEF China Ethanol Forum, GEF managed to expand its coverage to the global market in 2010. ¶ Although the economic and political uncertainties prevail in 2012, the ethanol industry will continue to be an exciting part of the global business and economy in the future. The world ethanol production and trade patterns have experienced big changes since 2011 and have welcomed new suppliers and consumers emerging from the globe in 2012.

#### Ethanol industry is expected to do well in 2012

Schill, 7/20 (Susanne Retka Schill, writer for the ethanol producer magazine, “EIA: US ethanol still likely to lead world export market”, Ethanol Producer Magazine, 7/20/12, <http://www.ethanolproducer.com/articles/8961/eia-us-ethanol-still-likely-to-lead-world-export-market>)

The U.S. ethanol industry is on track to be a net exporter of ethanol in 2012, although at lower levels that last year’s record. The U.S. Energy Information Administration (EIA) highlighted ethanol in its July 18 report, “This Week in Petroleum.” ¶ The EIA pointed to a number of factors that will influence the U.S. ethanol trade balance. “Sluggish gasoline demand, combined with ethanol blending limits, is currently restraining domestic consumption levels,” the report says. “At the same time, increased renewable fuel standard (RFS) mandates call for higher volumes in the fuel supply. In addition, sugarcane ethanol exported from Brazil looks to rebound from a low year in 2011 and compete with U.S. corn ethanol in the world market.” Though there will be uncertainty, EIA is projecting U.S. export volumes will remain significant and lead world trade in 2012.

#### The ethanol industry predicts a larger market.

McCoy, 6/29 (Daniel McCoy, reporter for Wichita Business Journal, “Ethanol industry hopes new fuel blend will ease struggles”, Wichita Business Journal, 6/29/12, <http://www.bizjournals.com/wichita/print-edition/2012/06/29/ethanol-industry-hopes-new-fuel-blend.html>)

The Environmental Protection Agency has issued final approval of a gasoline blend that is 15 percent ethanol, paving the way for retailers to sell it. There are still hurdles for the ethanol, paving the way for retailers to sell it. There are still hurdles for the ethanol industry to overcome before E15 sees widespread use. But after years of fighting to get the higher blend approved-most blended gas now is 10 percent ethanol-some in the ethanol industry think they are now closer to opening a larger market, one that could lift their recently struggling fortunes.

#### Ethanol industry is increasing, CNE in China proves

Balashov, 7/18 (Sergei Balashov, writer for proactive inverstors,s “UPDATE: China New Energy secures £7.4m contract from JEIC”, Proactiveinvestors United Kingdom”, 7/18/12,

http://www.proactiveinvestors.co.uk/companies/news/45709/update-china-new-energy-secures-74m-contract-from-jeic-45709.html)

“CNE has a market leading position in China and a strong track record in the design and construction of ethanol plants; demonstrating the success of the EMC business is important going forward and has the potential to add significant value is this technology is able to be readily exported,” said analyst at Arden John Wilson.¶ In an interview with Proactive Investors, non-executive director of China New Energy Richard Bennett said he had no idea why the company’s share price has been under pressure over the past few months.¶ “We’re in a market that’s expanding, the industry is going to grow, plants have to be built and we are winning contracts in very tough times. Why our share price keeps coming under pressure I just got no idea,” said Bennett.¶ “This is obviously a very tough market but the ethanol industry is growing and we are expecting to see more growth as the year goes on,” he added.

## No Link

#### No link---Their Casavant evidence is only talking about transporting agricultural goods which could include anything from wheat to cows – it doesn’t specify that TI will increase transportation of ethanol

### HSR Specific

#### **HSR Maglev Coming now – just needs funding**

Ho 12 (Catherine, Catherine Ho covers law and lobbying for Capital Business, which she joined in June 2011. She was previously a reporter at the Daily Journal in Los Angeles, covering LA civil courts and labor and employment law. Before that, she reported for the business and metro desks at the LA Times. She has interned at newspapers in Detroit, Wichita, Kan., and San Mateo, Calif. She’s a San Jose native and UC Berkeley graduate, Washington to New York City in 60 minutes by train, <http://www.washingtonpost.com/business/capitalbusiness/2012/07/13/gJQAqXgtmW_story.html>)

Trains that use maglev technology, or magnetic levitation, typically travel faster than traditional rail — Shanghai’s maglev train runs at an average of at least 139 miles per hour, compared to Acela Express that runs at an average 84 miles per hour. The only commercial maglev lines are in Aichi, Japan, and Shanghai. Maglev vehicles are suspended above the track and use magnetic propulsion. The project is unrelated to a proposal by Amtrak to build a high-speed rail system in the region by 2040. Amtrak, which runs the Acela Express, last week released a $151 billion proposal to redevelop and build out a high-speed rail network that would enable travel between Philadelphia and New York in 37 minutes, and between Washington and New York in 94 minutes. It is not the first time there’s been an interest in building a maglev system in the Northeast, but previous attempts were halted by lack of support from lawmakers and funding shortfalls. In 2001, officials with the Maryland Department of Transportation, the District of Columbia, Baltimore, Baltimore County and the Maryland Transit Administration formed the Baltimore-Washington Maglev Project, which competed for Federal Railroad Administration consideration to develop a 39-mile maglev line linking Camden Yard in Baltimore, BWI Airport and Union Station in D.C. But the project, which in 2007 was estimated to cost $5.1 billion, was cost-prohibitive and lacked legislative support, Maryland Transit Administration spokesman Terry Owens said. Owens said Northeast Maglev has not yet met with anyone at MTA. The Northeast Maglev project is still in its infancy, according to an attorney advising the company on regulatory and governmental issues. “It hasn’t launched all the way yet,” said John Merrigan, who co-chairs the lobbying practice at DLA Piper, one of three lobbying firms Northeast Maglev has hired since March to track legislation impacting magnetic levitation transportation, including the transportation bill President Obama signed July 6. The two other lobbying firms are American Defense International and Commonwealth Research Associates, to whom the company has paid $10,000 and $8,400 in lobbying fees, respectively. A spokeswoman for Northeast Maglev said it is “too early to discuss project details” and declined to comment on potential funding sources or a timeline for the project, saying only that company leaders are meeting with officials. “The Northeast Corridor is an economic powerhouse, but gridlock threatens to constrain growth,” the company said in a statement. “It’s time for America to harness technology that is faster, cleaner and safer ... we believe that as the U.S. looks at transportation solutions to meet growing demand, it makes sense to invest in the most advanced technology that is proven and available.” Northeast Maglev is not affiliated with Maglev Inc., the Pennsylvania company that, prior to declaring Chapter 11 bankruptcy in 2011, wanted to develop a maglev train from Pittsburgh International Airport to Greensburg, Penn. An Amtrak spokesman said he has not seen Northeast Maglev’s plans. One of the lobbyists affiliated with the project, Chris Brady of Commonwealth Research, agreed to pay $300 last month to settle a complaint brought by a Georgia government watchdog group before the Georgia Government Transparency and Campaign Finance Commission. The watchdog group accused Brady of paying $17,000 for House Speaker David Ralston and his family to take a trip to Europe in 2010 without first registering as a lobbyist in Georgia that year. Brady, whose firm has lobbied for a maglev line between Atlanta and Chattanooga, missed the deadline to file disclosure reports required of lobbyists, the commission found. Brady’s attorney said he agreed to pay $300 to settle the matter, but denied wrongdoing.

#### Meglev trains means no ethanol increase

Daschle 12 (Tom, served as the Senate majority leader, is now a senior policy adviser at DLA Piper, Northeast needs next generation's rail tech, http://www.politico.com/news/stories/0712/78355\_Page2.html

As anyone who travels the Northeast corridor knows, travel options are limited at best, maddening at worst. Flights are frequently delayed or canceled. Trains, particularly on longer routes like Washington to New York City, are often full. Even the fastest trains take almost three hours, rolling over infrastructure that is decades old and decaying. Indeed, the Northeast corridor is the nation’s most overcrowded, on the ground and in the air. Both policymakers and the public realize something must be done to cut the congestion and speed the lanes of commerce. Transportation experts from around the world are meeting in Philadelphia this week to discuss high-speed rail technology, shining a spotlight on the transportation challenges confronting the Northeast corridor. They are seeking solutions to break through congestion in the country’s most productive region, responsible for 20 percent of gross domestic product. The region is now poised for even greater growth — and additional misery for travelers. These experts need only look to Japan and the pioneering work being done there for a next generation transportation system. Faced with an increasingly dense urban corridor between its two largest cities, Tokyo and Osaka, Japan has spent decades developing technology that transforms what we think of as rail travel today. The technology is called SCMAGLEV, short for “superconducting magnetic levitation.” While that’s a mouthful, its benefits can be summed up in three words: safer, faster, cleaner. Powerful magnets propel a train forward and levitate it four inches above the ground. So trains can travel safely at a top speed of 311 miles per hour without the friction and drag of steel wheels on steel rail. On this train, we could travel from Washington to New York City in less than an hour. The technology combines the best of American innovation with Japanese precision. Two U.S. physicists devised the basic theory of a maglev transportation system at Brookhaven National Laboratory in 1969. Their use of superconducting magnets has now long been in development — primarily in Japan. The Japanese have experimented with high-speed maglev technology since the 1960s. In 2003, one train reached a record speed of 361 mph, recognized in the Guinness Book of World Records as the fastest train in the world. Now, after years of testing, Central Japan Railway Co. is building a commercial SCMAGLEV line from Tokyo to Osaka. In addition to astoundingly high speeds, this system offers a smooth, quiet, clean ride. Trains run within a dedicated guideway and don’t intersect with roads or other train lines, eliminating the possibility of a collision. Imagine what these trains would do for the Northeast corridor. Traveling from Washington to New York City (or Baltimore, Philadelphia or Wilmington) in less than an hour, downtown to downtown, would revolutionize business travel, making it easy to travel for a full day of meetings — and still have dinner at home. At the same time, it would relieve congestion in the air, reducing the need for short flights and opening lanes for the longer routes, for which ground transportation at any speed is less attractive… …There has been much discussion in recent years about spending more than $100 billion to upgrade the current Northeast rail system so that trains could finally reach speeds common in Japan and Europe more than a generation ago. As Americans, with a history of taking on big, cutting-edge projects, we should be asking why we would want to spend huge amounts of money to replicate technology already nearly 50 years old — so dated that it was developed before the Internet even existed. Now is the time to skip over last generation’s technology and embrace the next. It will cost a bit more — but the benefits could be exponentially greater. As a collateral benefit, building SCMAGLEV trains will lift the economy short term; being able to travel from Washington to New York in under an hour will boost it even more. It’s time to bring a technology born in America back home.

#### No Link – its normal means

Kasai 12 (Yoshiyuki, Chairman, Central Japan Railway Company (JR Central), Superconducting Maglev a Revolutionary Concept, <http://www.huffingtonpost.com/yoshiyuki-kasai/superconducting-maglev-a-_b_971425.html>)

The invention of the railway in early 19th-century Britain was a revolution that represented a major advance in transportation technology. Almost two centuries later, the basic concept of steel wheels running on steel tracks reached its ultimate expression with the emergence of Japan's Shinkansen, which offered unprecedented high-speed performance and safety for intercity passenger transport. Today, having significantly improved the Shinkansen over the past decades, the Superconducting Maglev or SCMAGLEV, a superconducting magnetically levitated linear motor car, has made its debut as the latest advance in transport technology to emerge in Japan. This revolutionary system combines a cruising speed equal, at 500 kph, to that of a cruising airplane, with the convenience and transport capacity of the Tokaido Shinkansen. The key innovation of the SCMAGLEV lies in the powerful superconducting magnets mounted on the vehicle and coils arrayed along both guideway walls, which enable the cars to levitate and run. As the train is magnetically held in the center of the guideways, it will not derail, ensuring a higher degree of safety than even the Tokaido Shinkansen, which has a 46-year accident-free safety record. Superconductivity is a phenomenon where electrical resistance of certain metals falls to zero at ultralow temperatures (for niobium-titanium the SCMAGLEV train adopts, the temperature is minus 269 C). Meeting zero resistance, it is possible to apply a large electric current and create an extremely strong magnetic field. This superconducting magnet is the key technology that enables levitated travel at very high speeds. Car interiors are kept at a magnetic field equivalent to that found in ordinary living environments by shielding the superconducting magnets and coils. In May, the Land, Infrastructure, Transport and Tourism Minister reached a decision in accordance with the Nationwide Shinkansen Railway Development Act to proceed with the construction of the Chuo Shinkansen, adopting the superconducting magnetically levitated linear system to connect Tokyo, Nagoya and Osaka via the Southern Alps route. The minister also determined that the Central Japan Railway Co. (JR Tokai) would construct and operate it. JR Tokai will finance the entire cost of construction, over 5 trillion yen ($64 billion), to cover the initial route between Tokyo and Nagoya with the goal of inaugurating service in 2027. When the Chuo Linear Shinkansen starts operations between Tokyo and Nagoya, travel time will be reduced from the current 96 minutes to 40. Completion of the line through to Osaka will bring the current 145-minute travel time down to 67 minutes. Transforming Japan's main transportation artery into a dual trunk-line system with both the Tokaido and Chuo Linear Shinkansen not only ensures keeping transportation links open in the event of a natural disaster, but through route diversification and greatly enhanced service will also bind even more closely together the major cities along the Tokyo-Nagoya-Osaka route and contribute to the revitalization of the entire Japanese economy. In addition, the SCMAGLEV represents a major environmental contribution by Japan that has the potential to greatly enrich people's lifestyles. For while its high-speed performance and convenience will encourage people to shift away from aircraft and automobiles, the SCMAGLEV will consume only half the amount of energy, emitting one-third the amount of carbon dioxide compared to aircraft or passenger cars. In today's world with diversified transportation technologies and lifestyles, there is no one-size-fits-all transportation system such as the railway that suited the 19th-century environment. In the case of the SCMAGLEV, the conditions under which its full potential can be realized are limited to areas of dense population and high economic activity. A major prerequisite is the existence of a large potential market willing to pay a little extra for ultrahigh-speed transport with smaller environmental consequences. The areas around the Tokaido Shinkansen and Chuo Linear Shinkansen offer perhaps the most ideal conditions in the world in this respect. The population along these corridors exceeds 60 million and more than 140 million people use the Tokaido Shinkansen annually. Assuming a slight increase in the total number of passengers with slightly raised rates, the combined revenue for both the Tokaido Shinkansen and Chuo Linear Shinkansen will enable profitable operations in the first year of the Nagoya service, with profit increasing each year thereafter. If new developments along the new route are taken into account, profitability will be even higher. Of all the Shinkansen trains operating in Japan, only the Tokaido Shinkansen was constructed without government subsidies, and has been profitable since its first year, combined with conventional line revenues. This situation will not change in the case of the Chuo Linear Shinkansen. The foundations of a SCMAGLEV-related manufacturing sector will be established through orders for components and products for the initial stage of construction of the route between Tokyo and Nagoya. It will consolidate its evolving manufacturing base by getting further orders from the planned construction aiming to reach Osaka. The SCMAGLEV is a combination of divergent, cutting-edge technologies. Once inaugurated, the Chuo Linear Shinkansen will give rise to consistent and high levels of demand for maintenance, renewal and improvement for advanced technologies. This will enable the SCMAGLEV sector to grow into a pillar strong enough to contribute significantly to Japan's industrial and technological competitiveness. However, we should not be satisfied with the SCMAGLEV running along just one route in Japan. We should aim to further broaden the use of this revolutionary system that will lead to improved performance and reduced cost. A series of Shinkansen lines were opened after the inauguration of the Tokaido line, beginning with the Sanyo, then the Tohoku and Joetsu, moves that expanded the market for Shinkansen-related industries. In the case of the SCMAGLEV, however, expanding the technology into the international arena along with development in Japan should be considered. Looking at the world from this perspective, after the Tokaido and Chuo arteries, it is the northeast corridor in the United States, connecting Boston, New York and Washington, that best satisfies the conditions for favorable SCMAGLEV operations. Over a year has passed since a joint Japan-U.S. team began focusing on this corridor. Japan would provide SCMAGLEV technology and system integration skills, but the key for realization is whether the United States can organize a privately financed entity to construct, maintain and operate the northeast corridor maglev. The federal and local governments also face severe financial constraints, and as with Japan, the feasibility of the project hangs on whether or not it can be privately owned and operated. The result of preliminary research in the United States shows that the huge reduction in travel time afforded by the ultrahigh-speed SCMAGLEV is sufficient to bring about a significant enough shift away from automobile travel to enable a highly profitable SCMAGLEV operation and attract private investment. Still, even with an entirely private project, the approval of regulatory authorities is required for constructing essential infrastructure. The Federal Railroad Administration's view of U.S. high-speed rail project is that "the railway lines running throughout the country have to form a single network and therefore, it is necessary to make standards uniform across the country." However, most of the U.S. rail network is single track, not electrified for freight traffic, and completely unsuited for high-speed rail. The United States is a vast country. Due to its size, long distance intercity travel in the country is, and will remain, the domain of air transport with shorter distances being predominantly covered by automobiles. The best way to utilize the SCMAGLEV would be to offer it as an alternative to shuttle flights and automobiles that have reached saturation levels along the northeast corridor, improving the flow of the whole transport network of United States. How to gain the understanding of the many parties concerned is our greatest challenge and where our priority lies. We are entering completely uncharted territory, but we cannot stand idly by. History has taught us that rationality and legitimacy ultimately prevail. With this in mind we are proceeding along the path we have set ourselves hand in hand.

#### ITS NORMAL MEANS

DOT 5 (Department of transportation, Report to Congress: Costs and Benefits of Magnetic Levitation, http://www.fra.dot.gov/downloads/rrdev/maglev-sep05.pdf)

Although each region conducting planning under the Maglev Deployment Program is best able to evaluate the benefits and costs of the proposed projects within its own region, the Federal Government must view Maglev in the context of national needs and priorities. From a local perspective, a particular project may promise overwhelming benefits in relation to its costs. Nothing in this study should suggest that a State or metropolitan area not act accordingly, within its own financing capabilities and those of its potential partners, and subject to such applicable Federal laws as those bearing on safety and the environment. However, from a strictly Federal viewpoint, this report reaches the following conclusions: Intercity systems based on currently available Maglev technologies are expensive, with high per-mile costs. Conversely, if implemented, Maglev might provide line-haul travel times that improve on those of any other mode of ground transportation. The following noteworthy factors place Maglev travel times in their broader context: ⎯ Maglev’s line-haul speed advantage can only result in substantial total travel time improvements in markets in which line-haul travel times are a significant proportion of total travel times⎯i.e., in markets more than approximately 150 miles in length. ⎯ Beyond trip distances of about 500 miles, air’s superior cruising speeds would begin to detract from Maglev’s advantages of station location and access. ⎯ Therefore, Maglev’s most appropriate transportation niche is in corridors of extremely high travel density that include strong city-pair markets in the 150-to500-mile range. In the densely populated corridors where Maglev has the greatest potential for yielding significant transportation benefits to recompense its costs, existing development, environmental concerns, and other practical constraints would make it very challenging to acquire and develop an alignment that permits current Maglev technologies to fully achieve their trip time improvement capabilities. In comparison with today’s available Maglev systems, other contemporary HSGT technologies (IHSR and, in some cases, New HSR) typically show higher projected transportation and economic benefits, including highway traffic congestion relief, [ES-6]relative to their costs, and could bring many of the advantages of HSGT to many more markets at much less cost. The proposed short-distance demonstrations under the Maglev Deployment Program, if any are constructed, could ultimately produce operational, engineering, and financial data on Maglev under American conditions, at a lower level of outlay and risk than would pertain to a lengthier and costlier installation. Such data might augment information gathered in other countries that have already invested significant resources in Maglev technology, in the event that private and public entities in the United States should someday contemplate longer-distance Maglev systems in corridors of the highest density. In and of themselves, however, the short corridors under consideration in the Maglev Deployment Program would not fully demonstrate Maglev’s transportation potential, which is best perceived in systems serving intercity corridors over some 150 miles long. As a form of transportation based on new technologies, Maglev is subject to a high degree of uncertainty. Consequently, whatever policy the Federal Government adopts toward Maglev in the short term, the American transportation community⎯including the private sector⎯might profitably monitor the Maglev industry for noteworthy changes in its prospective costs, benefits, performance, and applicability to the evolving transportation environment in the United States..

#### Mag Lev solves ethanol

DOT 5 (Department of transportation, Report to Congress: Costs and Benefits of Magnetic Levitation, http://www.fra.dot.gov/downloads/rrdev/maglev-sep05.pdf)

The following advantages may pertain to Maglev systems: Reduced maintenance cost. Inasmuch as there is no contact between the vehicle and guideway, there is no wheel or rail wear, which may lead to reduced equipment and maintenance-of-way costs from those of analogous steel-wheel systems. However, a Maglev vehicle still exerts physical forces on the guideway, and the precise extent of the maintenance cost advantage is unknown due to the lack of long-term operating experience in revenue service. Environmental effects. At moderate speeds such as would be encountered in built-up areas, Maglev is significantly less noisy than wheeled systems like rail vehicles or buses. However, at high speed (greater than 155 mph), aerodynamic noise predominates and is quite loud (up to 90dbA at 100 feet). Although proponents claim the elevated guideway can be designed to be relatively attractive and non-intrusive, its prospective neighbors may not necessarily share that viewpoint. Electrically driven, the system produces no pollution along the guideway; however, the power produced at the electric utility plant does contribute to pollution or to such other environmental challenges as the disposal of spent nuclear waste. Efficient Performance. Maglev may enable higher speed and reduced energy use compared to rail due to lighter vehicles, greater banking ability, lack of contact, and use of linear motors. Linear motor propulsion avoids wheel/rail adhesion problems and allows higher acceleration, braking, and steeper grades⎯up to ten percent. It has been claimed that Maglev offers a leap in performance relative to comparable high-speed rail on new right-of-way, where incremental improvements to high-speed rail technology may cost more and deliver less as the technology reaches a limiting plateau (currently on the order of 200 mph). With speed up to 310 mph, Maglev is envisioned as filling a niche, and making ground transportation fully competitive with highway and air travel in certain corridors for trips of about 150 to 500 miles. High Capacity. Under the assumptions of Table 7, a single Maglev guideway could accommodate approximately the same number of unidirectional passengers-per-hour that three airport runways or two lanes of highway could handle. 88 Low Proportional Cost Increment Over New HSR. Although the cost of Maglev appears high, studies of recent high-speed rail systems in Germany envision that New HSR might approach, or even exceed, Maglev in cost. It seems clear that, in many, if not most cases, new HSGT systems cannot follow existing routes that were often designed for speeds below 79 mph. Only modest curvature in both horizontal and vertical alignment can be tolerated for ride comfort reasons. This may necessitate extensive elevated structures and occasional tunnels, depending on topography, for some high-speed rail systems, thereby narrowing the differential with Maglev costs. The costs for California, shown on page 10 above, indicate a per-mile differential between New HSR and Maglev on the order of $11 to $13 million, not a huge amount when the cost per mile reaches the $50 to $100 million level. Finally, engineers of the Central Japan Railway Company have recently estimated that Maglev on their proposed new, 88 As noted in Table 7, capacity comparisons in real-world applications would depend heavily on site-specific conditions. [36]inland route between Tokyo and Osaka might cost 20 to 30 percent more than the New HSR alternative. Passenger Service Quality. With its contactless suspension, Maglev offers the opportunity to provide a ride quality for its passengers that may exceed that obtainable on existing modes. Furthermore, as a ground mode, Maglev can penetrate to the heart of the cities it serves while also servicing airports and “beltway-type” suburban stations. Its projected, relatively low operating costs and quick turnarounds would also make a very high frequency of service feasible. Finally and most importantly, the high operating speeds would, in corridors with appropriate city-pair distances, allow Maglev to move passengers at least as quickly as any other mode, even air. For example, as projected in the CFS, the Maglev line-haul trip time between New York and Boston of about one hour would be within minutes of what the airlines can currently schedule 89 ; moreover, with its downtown stations, Maglev would provide much better door-to-door travel times than are feasible by air. These time, comfort, and convenience factors may be expected to influence the modal choices of existing travelers, create new demand, and improve the economics of HSGT, once the question of high initial costs is dealt with

## Ethanol Good

### Warming

#### Renewable biofuels key to solve warming

Filho and Macedo, no date (Luiz, visiting researcher with the Institute for Advanced Studies of the University of São Paulo. He has a degree in Electronic Engineering from the Aeronautics Technology Institute (ITA), São José dos Campos, Brazil, and a doctoral degree from the University of Colorado, Boulder, U.S.A. and Dr. Isaias, Mechanical Engineer from Brazil's Aeronautical Institute, “Contribution of Ethanol to Climate Change,” http://sugarcane.org/resourcelibrary/books/Contribution%20of%20Ethanol%20to%20Climate%20Change%201.pdf)

Biofuels; Ethanol in Brazil and Climate Change¶ Global studies (Pacala 2004) show that renewable biofuels are a necessary part of this transformation. It will not be possible to reach the desired goal for limiting the increase in temperature without a significant increase in the participation of renewable biofuels in the new energy matrix. It is interesting to consider the impact on global temperature increase caused by the introduction in Brazil of fuel ethanol to replace gasoline. To do this we must first establish a baseline. It has been common lo use as a baseline a "business as usual" scenario that corresponds to what would occur if no action were taken to reduce emissions. This emissions scenario is adopted by the lPCC and is based on demographic projections, the intensity of energy use and the technology used for its generation. This is done for the whole world, although it may sometimes be compiled regionally. In the case of individual projects, such as those in the CDM, the baseline is constructed using an approved methodology that seeks to establish the most plausible scenario. The "business as usual" (BAU) baseline scenarios are hypothetical, or counterfactual - future scenarios that could happen, but have not happened-and therefore are not subject to objective demonstration or verification. Furthermore, these scenarios lend themselves to manipulation.

#### <WARMING IMPACT>

### Economy

#### **Ethanol key to stimulating every sector of the economy**

Ethanol Across America 6 (EAA is a non-profit, non-partisan education campaign of the Clean Fuels Foundation and is sponsored by industry, government, and private interests., “Issue Brief: Economic Impacts of Ethanol Production, Spring 2006, http://www.ethanol.org/pdf/contentmgmt/Issue\_Brief\_Economic\_Impact.pdf)

The impact of ethanol production and use goes far¶ beyond Rural America. Virtually every sector of the¶ U.S. economy benefits from the rapidly expanding¶ ethanol industry. From the technology sector which¶ provides software for sophisticated plant operations,¶ to the manufacturing sector, which provides ¶ plant components, ethanol production stimulates ¶ economic activity. Economists continue to measure¶ the impact of ethanol production at the local and¶ national level. A variety of econometric models are¶ used to calculate this rapidly expanding business¶ activity. This publication examines a variety of¶ ways in which the ethanol industry affects the U.S.¶ economy and local communities. As this largely¶ Midwestern industry expands across the continent,¶ these economic impacts are projected to have an¶ ever expanding effect from coast to coast.

#### **<ECON COLLAPSE IMPACT>**

## No Impact

### A2: Food Prices

#### 1. Alt causes to high food prices

Forbes 3/15 (“Why Are Food Prices So High?,” March 15, 2012, http://www.forbes.com/sites/steveodland/2012/03/15/why-are-food-prices-so-high/2/)

What’s going on?¶ 1) China and India have the largest and fastest growing populations creating demand for food from around the world. So one impact on prices has been rising demand from these countries, especially China.¶ 2) The Japanese tsunami and earthquake last year drove up seafood prices by nearly 6%.¶ 3) Vegetable prices rose 50% in the past month. Crop damage in Australia, Russia, and South America are to blame.¶ 4) Government subsidized and mandated ethanol use has increased the demand for corn and reduced acreage dedicated to food thereby pushing food prices up. A Congressional Budget Office report concluded that the increased use of ethanol accounts for 10-15% of the increase in food prices.¶ 5) Changes in government subsidies for crops other than corn for ethanol impact food prices.¶ 6) Regulations restricting use of herbicides, pesticides, fertilizers, etc., while positive on some fronts, may result in poorer crop yields.¶ 7) Increased oil prices drive up costs for transportation, fertilizer, plastic packaging and inks used to print packaging.¶ 8) In some areas of the U.S., the government is paying farmers not to plant to save water. This reduces food supply. 9) Drier and hotter weather trends in farming areas generally reduce crop yield and drive prices higher.¶ 10) Import tariffs and export taxes distort supply and demand, and hence food prices around the world.

#### 2. Ethanol has a minimal impact on food prices – their authors are all hype

Washington Times 7/25 (“LETTER TO THE EDITOR: Ethanol’s impact on food prices is minimal,” July 25, 2012, http://www.washingtontimes.com/news/

2012/jul/25/ethanols-impact-on-food-prices-is-minimal/)

The editorial, “Biofuel mandates worsen drought’s effect” (Comment & Analysis, Tuesday) makes some dubious assumptions and comes to inaccurate conclusions regarding ethanol production and the food supply. While there is no denying the drought has had a substantial impact on this year’s corn crop, U.S. Department of Agriculture Secretary Thomas J. Vilsack has gone on the record to say that year’s yield, while down from record predictions, will still meet our food needs, and that obligated parties have the ability to meet the volume requirements of the Renewable Fuel Standard (RFS).¶ What ethanol critics need in this case is a strong dose of reality. Of the total U.S. crop planted, less than 1 percent is sweet corn. However, more than 99 percent is No. 2 yellow corn, or field corn, the primary use of which is livestock and poultry feed. Just 1.5 percent of that yield is used in actual food production — a minuscule fraction of our yearly corn crop.¶ The simple reality is the RFS was designed with situations such as this in mind, allowing for flexibility. Already the market has responded — ethanol production has slowed, and we currently have a surplus of nearly 1 billion gallons. Additionally, there are more than 3 billion Renewable Identification Numbers available to ensure obligated parties can meet the volume requirements.¶ To suggest any meaningful impact on food prices from ethanol production is just hysteria during a time of economic turmoil. Earlier this month, General Mills Chief Executive Ken Powell estimated that food prices would increase by 2 percent to 3 percent, compared to an increase of more than 10 percent last year, noting “consumers should see generally stable prices.”

### **A2: Phosphorous**

#### **Ethanol has no impact on phosphorus and SQUO fixes are solving the impact now**

Plumer 10 (Mike, Extension Educator, Natural Resources Management, with the University of Illinois at the Carbondale Extension Center, Executive at the Illinois Corn Growers Association, “ETHANOL PRODUCTION DOES NOT IMPACT INCREASING NITROGEN AND PHOSPHORUS RUNOFF, “ May 19, 2010, http://corncorps.wordpress.com/2010/05/19/ethanol-production-does-not-impact-increasing-nitrogen-and-phosphorus-runoff/)

Corn needs nitrogen and phosphorus in the soil to produce quality grain. For years, farmers have added these nutrients to the soil through manure applications and, more recently, directly injecting them into the soil.¶ However, the actual use of nitrogen and phosphorus per bushel has decreased in recent years. Corn yields are going up and nutrient applications are decreasing, allowing farmers to use 36 percent less fertilizer for their crops than they did only three decades ago. In addition, new tillage practices are reducing soil erosion which, in turn, decreases nutrient run off. If you look at their numbers, there is less phosphorus and nitrogen per bushel of corn now than ever before.¶ Currently there are two projects starting in Illinois that are addressing the movement of nitrogen and phosphorus by studying tillage, application dates and amounts. These studies will be a collaborative effort between the Environmental Defense Fund, American Farmland Trust, and University of Illinois researchers.¶ Increased ethanol production has had no impact on phosphorus and nitrogen run off.¶ Recent information is now looking at “legacy phosphorus and nitrogen” – a term coined by the EPA to indicate nutrients that were washed into the streams and rivers and deposited 50 years ago and are now being moved downstream by the heavy rainfall events of the last few years. It is estimated that it may take 30-50 years before this huge reservoir of sediment and nutrients will be washed out of the River system. Thus the significant reduction in applied nutrients/bushel currently is actually keeping the levels of nutrients in our water systems from being as high as they could be.

### **A2: Water Wars**

#### No water wars:

#### 1. Empirics --- water scarcity doesn’t cause war

Lawfield 10 (Thomas Lawfield is an MA candidate at the University for Peace. Water Security: War or Peace? Thomas Lawfield May 03, 2010, http://www.monitor.upeace.org/innerpg.cfm?id\_article=715)

In reality, water does not cause war. The arguments presented above, although correct in principle, have little purchase in empirical evidence. Indeed, as one author notes, there is only one case of a war where the formal declaration of war was over water.[20] This was an incident between two Mesopotamian city states, Lagash and Umma, over 2,500 years BC, in modern day southern Iraq. Both the initial premises and arguments of water war theorists have been brought into question. Given this, a number of areas of contestation have emerged: "Questioning both the supply and demand side of the water war argument [...] Questioning assumptions about the costs of water resources [...and] Demonstrating the cooperative potential of the water resource."[21] Why then is water not a cause of war? The answer lies in two factors: first, the capacity for adaptation to water stresses and, second, the political drawbacks to coupling water and conflict. First, there is no water crisis, or more correctly, there are a number of adaptation strategies that reduce stress on water resources and so make conflict less likely. Unlike the water war discourse, which perceives water as finite in the Malthusian sense, the capacity for adaptation to water stress has been greatly underestimated. For instance, I will discuss in particular a trading adaptation known as ‘virtual water’, which refers to the water used to grow imported food. This water can be subtracted from the total projected agricultural water needs of a state, and hence allows water scarce states to operate on a lower in-country water requirement than would otherwise be expected.[22] This means that regions of the world that are particularly rich in water produce water intense agricultural products more easily in the global trade system, while other water scarce areas produce low intensity products.[23] The scale of this water is significant - Allan famously pointed out that more embedded water flows into the Middle East in the form of grain than flows in the Nile.[24] In addition, there are significant problems around the hegemonic doctrine of the water crisis. Many authors point to relatively low water provision per capita by states, and suggest that this will increase the likelihood of a state engaging in war with a neighbouring state, to obtain the water necessary for its population. This is normally a conceptual leap that produces the incorrect corollary of conflict, but is also frequently a problem of data weaknesses around the per capita requirements. For instance, Stucki cites the case of the Palestinians being under the worst water stress, with a per capita provision being in the region of 165m³/year.[25] Unfortunately, such an analysis is based on false actual provision data in this region. Based on the authors work on water provision in Lebanese Palestinian refugee camps, the actual provision is over 90m³/month. Such a figure is highly likely to be representative of other camps in the region.[26] If this example is representative of trends to exaggerate water pressures in the region, then we should be sceptical about claims of increasing water stress. Furthermore, given that many water systems have a pipe leakage rate of fifty per cent, combined with a seventy per cent loss of agricultural water, significant efficiency enhancements could be made to existing infrastructure. Combined with desalination options in many water shortage prone states, there is an overall capacity for technological and market driven solutions to water scarcity.[27]

#### 2. Cooperation- Water wars are a unique scenario that force cooperation – it’s too valuable

Wolf et al 05 (Aaron T., professor of geography in the Department of Geosciences at Oregon State University and Director of the Transboundary Freshwater Dispute Database, Annika Kramer is a research fellow, Alexander Carius is director of Adelphi Research in Berlin, Geoffrey D. Dabelko is the director of the Environmental Change and Security Program at the Woodrow Wilson International Center for Scholars in Washington, D.C, “Water Can Be a Pathway to Peace, Not War, ”http://www.wilsoncenter.org/topics/pubs/NavigatingPeaceIssue1.pdf)

These apocalyptic warnings fly in the face of history: no nations have gone to war specifically over water resources for thousands of years. International water disputes—even among fierce enemies—are resolved peacefully, even as conflicts erupt over other issues. In fact, instances of cooperation between riparian nations outnumbered conflicts by more than two to one between 1945 and 1999. Why? Because water is so important, nations cannot afford to fight over it. Instead, water fuels greater interdependence. By coming together to jointly manage their shared water resources, countries can build trust and prevent conflict. Water can be a negotiating tool, too: it can offer a communication lifeline connecting countries in the midst of crisis.