I would like to thank the Long Beach Area Chamber of Commerce for the opportunity to be with you today. It is good to be back in Long Beach.

The World Shipping Council represents the international liner shipping industry. Most of our member shipping lines call the ports of Long Beach and Los Angeles, and of course the port complex here is the busiest in the United States. There is no more appropriate place or time to talk about the state of the liner shipping industry and its prospects for the future.

It is no secret that the shipping industry in general, especially the liner shipping sector, is undergoing rapid and substantial changes. Sustained weakness in global trade growth, consistently intense competition, a mismatch in short-term supply and demand, and historically low freight rates have combined to require the industry to seek cost reductions and operating efficiencies wherever savings can be found.

That drive for efficiency has resulted in technological innovation in terms of highly efficient new vessels, and the need for efficiency has also caused carriers to seek operational savings through slow steaming and alliance structures that are designed to use assets as effectively as possible. Although these measures have reduced costs significantly, sustained
financial pressures have also led to structural changes, with a number of mergers having been completed last year, and more working through the process this year.

In short, this is a time of transformation – both operationally and structurally – in the liner shipping industry. Although this process is a difficult one for everyone involved, the good news is that the liner shipping industry will continue to invest and will continue to provide the services needed to carry the world’s international trade.

People can be uncomfortable with change. Like it or not, though, change has come and will continue to come to the liner shipping industry. The task is to recognize that change as an opportunity to build an industry that is more stable, more efficient, and more resilient to the demands of the shipping market.

At the World Shipping Council, we deal with public policy and regulatory matters. As a trade association, we are not direct participants in commercial issues such as the market forces that are driving a re-structuring of the industry. A big part of our job, though, is to inform national and regional governments and international regulatory bodies about how the industry works as a commercial matter, and how that commercial reality needs to be reflected in regulatory decisions that affect the industry. In that work, for example, we maintain a dialogue in the U.S. with the Congress and with administrative agencies; we maintain an office in Brussels in order to interact with the European Union; and we have observer status at the International Maritime Organization or IMO and at the World Customs Organization.

I understand that the theme for this week’s events sponsored by the Chamber is “Global Synergies and Innovation.” What I would like to do today is to explore a couple of examples of where the commercial and operational world meets the regulatory world, and to look at the ways in which regulation can be effective for its intended purpose without interfering with the industry’s progress toward both structural and operational efficiency.

How we conduct the conversation about innovation and regulation matters. It has always been the case that times of rapid change can cause both private sector players and government regulators to question what they know. Some of that questioning is productive. But that questioning ceases to be productive if it results in changes to the rules of the game that are driven by a fear of the unknown or that are driven by listening to those who talk the loudest, rather than being driven by well-considered legal and policy objectives.

For those of you in the shipping and marine terminal industries, relax, I am not going to talk about the SOLAS container weight verification requirements. I would like to look at two other regulatory situations – one dealing with economic regulation and one dealing with environmental regulation.
Let’s start with economic regulation.

As I mentioned a few minutes ago, there are several recent, active and potential acquisitions or mergers in process in the liner industry. CMA CGM is acquiring NOL/API; Hapag-Lloyd acquired CSAV and is now in discussions with UASC; Hamburg Sud acquired CCNI; COSCO and China Shipping are merging. More consolidation may well follow.

That transactional activity has had the knock-on effect of causing many of the operational alliances within the industry to re-structure. For example, just in the last couple of months, we have seen announcements of the formation of the “Ocean Alliance” (which includes CMA CGM, China COSCO Shipping, Evergreen, and OOCL) and a group called “THE Alliance” (which includes Hapag-Lloyd, NYK, K-Line, MOL, Hanjin, and Yang Ming, with others perhaps to join). These new groups join the existing “2M” alliance between Maersk and MSC. Other existing alliances will be reconfigured or will cease to exist as these new alliances come on line.

In the United States, these alliance agreements, like all carrier agreements, must be filed with the Federal Maritime Commission, and there is a waiting period before the agreement can go into effect. The Commission uses that time to ask questions and to analyze the possible effects of the agreement on competition in the trades involved. The process results in a thorough review that is based on a legal standard that everyone understands. In other words, the current crop of alliances is new, but both alliances and the FMC’s role in reviewing them are known territory. This is also true in Europe, where the legal standards for alliances are well-established both by specific regulation and by competition law.

What I would like to discuss with respect to these new alliances is not what we already know – that is, what alliances are and how regulators review them. Instead, I would like to talk about what some observers have assumed is fact, but that is not. Let me give you an example.

When West Coast ports experienced serious congestion problems during the long labor negotiations in 2014 and 2015, part of the resulting discussion about causes of congestion focused on alliances. Among some observers, it became an article of faith – or at least a frequently repeated talking point – that alliances inherently cause congestion. In fairness, there were implementation issues in some alliances that probably did contribute to terminal congestion, but the fact that certain operational issues arose within an alliance is not the same thing as saying that alliances by their nature cause congestion. They do not. In fact, the effective use of assets that can be achieved through alliances can provide efficiency opportunities both on the land side as well as efficiencies on the water. As with any industrial process, the key is planning and execution.
It is always good to learn from past mistakes, and carriers involved in some of those earlier activities no doubt have done so. What we cannot allow ourselves to do, however, is to assume that difficulties that may have arisen in the past are inherent in alliances, as opposed to simply being issues that arose in the context of implementing particular alliances. Just because something was true in a particular case, that doesn’t mean that it is always true. We would do well to keep in mind the difference between coincidence and causation.

The reason that I raise the point that we cannot not repeat yesterday’s debate and just assume that it still fits today’s facts is that we already hear voices both in the U.S. and in Europe that have argued that the industry’s current response to some of the most difficult market forces in decades requires that all of the regulatory rules should be changed.

For example, there are voices in the U.S. inviting the Federal Maritime Commission to become involved in very detailed aspects of the operations of carriers within alliances – operational aspects that have nothing to do with competition. Those requests also call for speculative evaluations of the adequacy of shoreside services provided by truckers, chassis providers, and terminal operators.

As another example, some academics and other commentators in Europe have suggested that governments should protect ports from having to compete to offer the best facilities and the best services to carriers and shippers, on the theory that less port competition would somehow better protect taxpayer investments in ports.

These sorts of invitations to regulators are problematic for several reasons. First, they invite regulators to assert jurisdiction beyond the legal boundaries under which those regulators operate. Second, inviting regulators into speculative inquiries about the activities of supply chain players that are not members of the alliances under review would encourage an aimless inquiry that would have no definable objective. Third, although governments in many countries regulate to protect competition and the public, those same governments also properly rely on companies in industries of all types to decide how best to deliver the products and services that they offer, and we rely on the innovations offered by those companies to best respond to the signals that the market sends.

Finally, these various calls for regulators to engage in broad and undefined experiments in industrial engineering are not backed by empirical evidence or a cohesive economic theory that has even acknowledged – much less evaluated – the many unintended consequences of such an experiment. Those of us in industry, academia, and government who speak to these issues must have the humility to acknowledge that there are things we do not know. We learn best by doing, not by theorizing.
So to return to this week’s theme of global synergies and innovation, the structure of the global liner shipping industry is changing in what may well turn out to be one of its most substantial restructurings in decades. Part of the current transformation involves mergers and acquisitions; part involves the creation of new alliances that are designed to improve services and increase efficiencies. These changes are not the result of the industry waking up one day and deciding that it wanted to do things differently. Instead, these changes represent carriers’ best efforts to respond to market forces that compel change in order for companies to grow, to maintain service levels, and even to survive.

There are a lot of balls in the air at one time, and change at this pace can cause people to become uneasy. That is a natural reaction, but we cannot allow that reaction to place unreasonable hurdles in front of this industry that is working to find a better way to operate and to serve its customers.

The existing regulations that govern mergers and carrier alliances are both comprehensive enough and flexible enough that they can flag any issues that require regulatory intervention, while at the same time allowing the fundamental business decisions about what works and what doesn’t work to be made where all such decisions must be made – in the marketplace.

Let me switch gears for a minute and turn to a different situation in which regulation will have an impact on innovation within the liner shipping industry. This example comes from an issue that is not unique to the shipping industry – air emissions. The broad issue of air emissions is generally thought of in two distinct parts. The first part is pollutants that have adverse health effects, such as SOx, NOx, and particulates: so-called “criteria” pollutants. The other segment is greenhouse gases, the most relevant being CO2. As it turns out, at least with respect to shipping, the two categories of air emissions have more to do with each other than might be obvious.

Let me give you a brief outline about how the International Maritime Organization and its member nations regulate criteria emissions and carbon, and then I will talk about how those two regimes fit together in a way that is often overlooked.

SOx and NOx are regulated under the IMO’s MARPOL Annex VI, which created a mechanism for setting up near shore Emission Control Areas (or ECAs). There is a North American ECA in place that requires ships operating within two hundred miles from shore to use low sulphur fuel with a sulphur content of no more than 0.1%. This North American ECA has significantly improved air quality here in California. There are also ECAs in place in the North Sea and the Baltic Sea, and in the Caribbean. China has set up ECAs under national law, and other jurisdictions around the world are considering adopting ECAs.
The International Maritime Organization is also active on the CO₂ front. Starting back in 2013, all vessels over 400 gross tons are required to prepare and implement a Ship Energy Efficiency Management Plan. For new builds starting in 2013, vessels must meet the requirements of an Energy Efficiency Design Index – or EEDI – which is a set of design efficiency requirements that become more strict over time. The purpose of this EEDI requirement is to insure that the world fleet becomes substantially more fuel efficient as older ships are recycled and new ships are built.

In addition to these CO₂ reduction measures that are already in place, the IMO will adopt, probably in October of this year, a global fuel consumption data system that will require all covered vessels to collect, report, and verify their fuel consumption and other information about the vessel. That database will allow the IMO and its member countries to better understand fuel consumption and efficiency in the global fleet, so that better decisions can be made about further means of reducing carbon emissions from shipping.

With that brief outline of the existing measures that have been adopted by the IMO to address vessel air emissions on an international basis, I want to turn to one additional requirement that has been adopted by the IMO. This is the part where SOx regulation meets carbon regulation.

In addition to the near shore emission control areas that I mentioned earlier, the IMO MARPOL Annex VI regulations establish a global marine fuel sulphur limit of 0.5%, which will apply everywhere a ship operates, including on the high seas. That 0.5% global sulphur cap will go into effect in either 2020 or 2025, and it will be the most expensive environmental regulation the industry has ever faced. Which of the two dates is chosen will be determined by the IMO member states after they have completed an analysis of whether there will be enough compliant fuel available in 2020. That decision will likely be made between now and the first half of 2017, possibly as early as October of this year.

While the global fuel sulphur cap was adopted in order to reduce total sulphur dioxide emissions from ships, including in areas where emission control areas have not been established, what is often overlooked is that the 0.5% sulphur cap will likely have a substantial impact on the other bucket of air emission regulations – those regulations that seek to reduce CO₂. The reason that a regulation reducing sulphur can affect carbon emissions is simple: it’s the price tag.

Low sulphur marine fuel costs a lot more than high sulphur marine fuel, so when burning higher sulphur fuel is prohibited in 2020 or 2025, fuel costs for shipping are going to increase considerably. How much? Estimates range from $30 billion to $60 billion per year –
that’s billion with a “b” – for all of international shipping. The liner sector’s share of that is about 30%.

So what does this have to do with carbon reductions? Although there is nothing close to global agreement on how carbon emissions might be “priced” or taxed in the future, high-side calculations of the “societal cost” for carbon for 2020 that have been calculated by the EPA and by consulting groups fall around $25 per ton emitted. If burning a ton of fuel emits roughly three tons of carbon, the high end of the range for hypothetical carbon pricing would be $75 per ton of fuel consumed. The cost of burning low sulphur fuel on a global basis represents an increased cost to vessel operators that is more than three times the highest estimates for a hypothetical carbon price or carbon tax.

Whether or not we ever see stand-alone carbon taxes, the implication for behavior modification is clear. The 0.5% global sulphur fuel cap, while designed to reduce sulphur emissions, will provide a substantial incentive to increase fuel efficiency in the shipping industry and to lower CO₂ emissions– an incentive far greater than any carbon pricing or carbon tax that has been contemplated for any other sector of the economy.

I don’t mean to suggest that the implementation of the global fuel sulphur cap by itself will fully address the issue of carbon emissions from shipping. It will not. But I will note two points.

First, there is a need to recognize the synergy between these two regulatory regimes – one for SOx and one for carbon. These regulatory systems were enacted through the same international organization, but the efficiency-inducing incentives from the fuel sulphur cap are rarely mentioned or considered in the context of the carbon debate. As the discussion about carbon emissions from ships continues, it is important to realize that what we do in one place can have an effect in another place.

Second, everyone in the supply chain needs to recognize that with the huge fuel cost increases scheduled to hit the carriers in as little as three and a half years, further investments in more fuel efficient ships, operational alliances, and every sort of cost control and efficiency enhancing measure possible will be explored and used by the shipping industry. The economic trends that I discussed earlier are not going away, and the economic marketplace within which the industry must operate will only be made more challenging by new regulatory requirements.

The liner shipping industry is at a cross-roads, with major economic and environmental challenges ahead. As we face those challenges, I encourage all of us – service providers, customers, regulators, academics, and advocates – to approach these challenges thoughtfully, and with a view towards finding solutions, not just stating positions. “Global synergies and innovation” – the Chamber’s theme this week, doesn’t apply only to machines or software or
business processes – it applies as well to the ways in which we understand and talk about problems and the ways that we create commercial and regulatory structures to solve those problems. We will need to be more than clever – we will need to be smart – to address the challenges that we face today.

Thank you.