

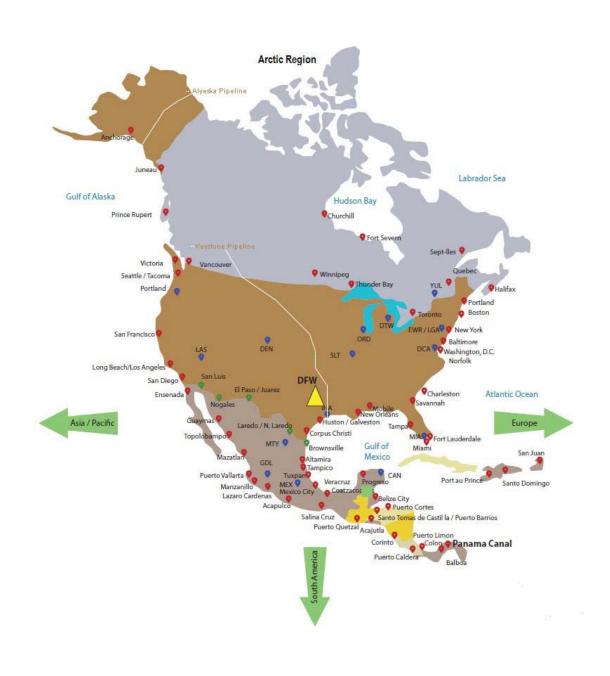
## UNITED STATES-MEXICO CHAMBER OF COMMERCE CÁMARA DE COMERCIO MÉXICO-ESTADOS UNIDOS

# FIRST NORTH AMERICAN SUSTAINABLE ECONOMIC DEVELOPMENT SUMMIT

Energy, Infrastructure, Transportation, Logistics and Border Facilitation August 26, 2014 - Four Seasons Resort and Club, Irving, Texas

#### A REPORT BY

THE CENTER FOR NORTH AMERICAN SUSTAINABLE ECONOMIC DEVELOPMENT, A PROJECT OF THE U.S.-MEXICO CULTURAL & EDUCATIONAL FOUNDATION



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#### Revisiting the North America Idea

A Comprehensive Approach to North American Sustainability - A Report from the First North American Sustainable Economic Development Summit held in Las Colinas, Texas, August 26, 2014.



#### **Executive Summary**

The North American Sustainable Economic Development Summit held August 26, 2014 in Las Colinas-Irving, Texas, brought together private and public sector leaders in energy, infrastructure, transportation, logistics, and border facilitation to address the challenges and opportunities present in North America. In his welcoming remarks, Al Zapanta, President and CEO of the U.S.-Mexico Chamber of Commerce, commented that the topics encompassed a wide range of interests, including the quest to secure energy independence and the effects on international trade due to the Panama Canal expansion and the opening of the Northwest Passage in the Arctic. From border facilitation, to transportation and infrastructure, to the technologies that support all industries, the Summit interwove a vital framework of industry and commerce through panel discussions and forums. Mexico's Consul General in Dallas, Dr. Jose Octavio Tripp, welcomed attendees and noted the important changes in Mexico's energy sector.

#### Congressman Greets Guests

U.S. Congressman Pete Sessions (R-TX), greeted guests at the Summit, stating "...we must consider the notion of North America in the context of today's present obstacles, including security and global governance." The idea of North America assumes major significance and relevance. In the context of the international arena, the influence of NAFTA institutes a global



asset of enormous value, making this the right moment to strengthen North American region economic integration.

#### Energy Centerpiece of the Day

The centerpiece of the day was the recently approved Mexico energy reform and the growth of domestic U.S. liquefied natural gas (LNG). As the United States, Mexico, and Canada continue to integrate their economies through trade, facilitation of knowledge, and shared systems, the region's competitive edge will sustain the growth. North American trade requires a comprehensive approach that takes into consideration infrastructure, logistics, transportation, and energy, with a focus on sustainability. These platforms of commerce drive current developments including negotiation for a Trans-Pacific Partnership, the ambitious 21st century trade agreement that the United States is negotiating with eleven Pacific countries. As NAFTA's partners leverage their relationship to strengthen North America's resolve in addressing issues of sustainable development and growth, the resultant actions are sure to drive the competitive advantage of the region.



#### Energy Panel

Moderating the Energy Panel, Texas Member of the Interstate Oil and Gas Compact Commission, Steve Molina, noted the importance of energy independence in North America. The reforms recently implemented in Mexico are creating an extraordinary opportunity for powerful, joint programs that shape the basis for a regional community.

Santiago Creuheras of Mexico's Ministry of Energy outlined the 21 laws that consolidate the new legal regime for the sector. The energy reform alone will have an enormous effect on the future of North America, creating hundreds of business opportunities in the hydrocarbon sector and supporting industries including technology, financing and investment, and education and training, among others.

Former Deputy Assisting Secretary of Technology and LNG Mr. Emil Pena with the U.S. Department of Energy. shared how the oil market is at a crossroads with multiple gamechanging influences strongly affecting outcomes; from the economy to technology and



geopolitics, it is time to strategically plan for energy independence and to collaborate between nations on how best to leverage North American assets in the effort of sustainability. NAFTA partners must embraces the coming energy revolution. Energy independence will be the cornerstone in North American sustainability.

#### Grow America Act

Victor Mendez, Deputy Secretary of Transportation, U.S. Department of Transportation, shared with the audience the vision contained in the initiative "Grow America Act," an ambitious plan to increase transportation investment on national infrastructure to keep pace with the growing demand, and also mentioned that the DOT is currently working to develop a national Freight Strategic Plan, which "...will look at freight movement in the U.S. from a multimodal perspective that includes rail, highways, and ports."

#### Mexico's Telecommunications Sector

Monica Aspe-Bernal, Coordinator in the Agency for Knowledge and Information in Mexico's Ministry of Communications and Transportation provided a snapshot of the changes in the legal framework of the Telecommunications Sector in Mexico, and the infrastructure projects in place, such as the transition to digital television and open access mobile network, among others, with a total investment of \$14 billion. She also presented details of Mexico's National Infrastructure Program, which will double the ports' capacity, and includes the construction of highways, passenger railroads, high-speed railroads, and a new airport in the Mexico City area.



#### The Border

Former Congressman Silvestre Reyes, US House of Representative for Texas, 16th District of Texas-El Paso opened the border discussion with a brief update on the Ports Act; before turning the conversation over to Ana Hinojosa, Deputy Asst Commissioner for the office on International Affairs, Homeland Security and Luis Fernando Pérez Azcárraga, Principal Customs Administrator for Strategic Planning and Coordination, Mexico.



Recognizing the key role that government institutions play in facilitating trade, Luis Fernando Pérez Azcárraga, presented Mexico's plan to meet the demands of foreign trade with the use of new technology and expanding facilities, while Ana Hinojosa, and explained the daily activities of the Customs and Border Protection Agency.

Dr. John Chrisos, Vice President, AS&E, discussed the importance of private sector's continued investment and development in new technologies that expedite trade in a secure and efficient manner along our border. He would go on to explain how advanced technology equips our nations with the tools essential to secure the borders against drugs, currency, and illegal immigration.



#### North American Focus

The Summit's strategic timing coincided with ongoing discussions between industry and government leaders eager to collaborate across a host of topics and challenges facing North American sustainability with urgency. North America cannot afford to delay sustainable economic development another moment. Energy driven initiatives will reawaken, and investments will once again pour into our region and into transportation infrastructure, and leadership must be in a position to respond appropriately.

Ambassador Juan Sosa commented that commerce will capitalize on the investments made in Panama to increase the capacity of the Panama Canal. The Arctic Region and Northwest Passage will play an increasingly greater role in global logistics and commerce, as reported by John Higginbotham, Senior Fellow, Carleton University and Center for International Governance Innovation, Canada.

Senator Doug Black, Province of Alberta, Canada, and David Manning, Government of Alberta's Representative in Washington, shared how it is imperative that North America forge a new



regional spirit of cooperation to drive progress especially in the energy sector, especially as it relates to logistics and important pipeline transportations systems and projects such as the XNL/Keystone Pipeline.

While we can be proud North America has already begun to implement innovative and advanced technologies that reduce risk, lower costs, improve performance, and generate revenues, we must become even better at it in order to drive sustainable development while we protect the environment. It is time to write a new chapter on North American integration.

#### Awaken to a New Day

North America awakens to a new day. The framework and strong network of relationships built over decades and generations exists for this moment. It is a time for strength, for innovation, and for a renewed, more integrated and sustainable North American economy.

Tony Jimenz, President, MicroTech, shared how energy and technology will require an educational component to maximize results. North America needs knowledge brokers, men and women equipped for the work ahead, and trained to deliver results. These future leaders must be skilled and keenly aware of the dynamics of bi-national and tri-national relationships, masters in their industry, and champions of reform. This new generation of leader will need to know how to efficiently manage public/private initiatives.

Luc Ringuette, of the United States-Mexico Market Exchange (UMEXX) commented, we must become adept at commercializing the technology transfer of Research and Development and capitalize on e-commerce platforms, such as "Connect Mexico," that bring advantages to businesses in North America, while optimizing the supply chains of major industries.

#### Gala Dinner

A highlight of the Summit was the Gala Dinner, where Kenneth Smith-Ramos, Director of Trade and NAFTA Office at the Embassy of Mexico to the U.S., spoke on behalf of Mexico's Secretary

of the Economy, Ildefonso Guajardo. Mr. Smith-Ramos' comments centered on the increasing scope and magnitude of Mexico's economy and global trade within North America, and the benefits to be derived from the various and broad reforms implemented in Mexico.

It is time to put sustainable measures into practice. Global energy resources show that over the last twenty-five years,









energy consumption has doubled as developing countries came onboard and online. The growth in these markets will create a surge in energy use that will see the consumption of energy resources double again within fifteen years.

North America must address the energy crisis and create new technologies, implement new efforts, and achieve independence. By this tri-national partnership, prosperity will be emboldened, opportunities will abound, and the education of our future leaders enriched. industry and government work in tandem to deliver solutions for a strong, sustainable economic development, we must collaborate in public-private partnerships to this end. Nations must build bridges embracing cultural ties and work jointly to address tri-national concerns; from infrastructure, to security, to energy independence.

#### Overview

North American Sustainable Economic Development Summit brings together leaders from both the private and public sector to address the challenges of securing energy independence in North America, international trade, manufacturing, and transportation, as well as the potential for the oil and gas industry due to Energy Reform in Mexico, growth of domestic LNG fields, the Panama Canal expansion, and developments in the Arctic region. As the United States, Mexico, and Canada integrate economies through trade, facilitation of knowledge, and shared systems, the region's competitive edge will grow, pivoting resurgence in North American dominance and positive promotion of trade and commerce throughout the globe.

The Summit concentrated its deliberations upon five North American sectors, including:

- North American Energy Independence
- Transportation and Logistics
- Infrastructure and Border Facilitation
- Manufacturing and Supply Chain Integration
- Technological Application and Networks





US-Mexico Chamber of Commerce Reception hosted August 25, 2014.





#### The History

The last twenty years have seen a major breakthrough in the way trade is conducted in the Western Hemisphere. The approval of the North American Free Trade Agreement (NAFTA) in the 1990's brought together the economies of the United States, Mexico and Canada, establishing the framework that created the world's largest free trade area, connecting 450 million people, and producing \$17 trillion worth of goods and services yearly.

The agreement has clearly been successful in its purpose of increasing trade and investment in North America, and has provided great benefits for the economies of Mexico and the United States. However, with the increase in the volume of goods and services now being exchanged, to continue to facilitate trade and travel in a timely manner existing infrastructure must receive new investment in order to modernize and meet expected demand.

During the 20 years NAFTA has been in effect, the energy picture in North America has experienced dramatic development with respect to consumption, production, distribution and, more importantly, oil and gas reserves in the North American continent. While energy consumption in North American has kept pace with increased populations and trade, what is dramatic are the positive steps taken and the results obtained in oil and gas production in Canada and the U.S. Now Mexico is enjoying energy Reform, which is speculated to have a tremendous impact on North America. Some even say that, with the recent reform approved and currently being implemented, trilateral agreements and concentrations now point towards a possible and impending North American OPEC.



The US-Mexico Chamber of Commerce has successfully organized conferences on Binational Transportation in the past. However, transportation is only one element of a rather vast universe of commercial relations in North America. For this reason, this year's Summit sought a comprehensive approach from which to address the challenges facing North America today.

Creating dialogue that encourages industry executives and federal agency leaders to work together in order to address North America capacity challenges currently impeding progress, or stalling its competitive advantage is the only manner in which our nations can succeed as a region. We must re-imagine the North America ideal beyond the silos of nationality, or business sectors and governmental agencies. The 21<sup>st</sup> Century version of North America mandates new cooperation that extends beyond existing boundaries and infuses existing synergies into the framework that bonds our countries and industries together.

#### Sustainability and North America

This focus of the Summit is timely because of the severe challenges and amazing opportunities that NAFTA countries have in front of them at this moment. It is a privilege to be a part of an informed dialogue that produces ideas and suggestions to address and improve the North American economy. The current economy faces many challenges ranging from economic blocs, to the competitiveness and pricing in international markets, to the promotion of international corporations and manufacturing capabilities in other parts of the world.

We must consider the notion of North America in the context of today's present obstacles, including security and global governance. The idea of North America assumes major significance and relevance. In the context of the international arena, the influence of NAFTA institutes an international asset of enormous value making this the right moment to strengthen the concept North America and indeed update the North American ideal.

Fortunately, the nations represented here today are heading in the right direction with a holistic approach. The reforms implemented in Mexico are creating an extraordinary opportunity for powerful, joint programs that shape the basis for a regional community. The



energy reform alone will have an enormous effect for the future of North America; creating hundreds of business opportunities in the hydrocarbon sector and supporting industries including technology, financing and investment, and education and training, among others.

The prospective outlook for this could not be better. According to the BP Energy Outlook 2035: North America report, by 2017 the region will be an exporter of natural gas and by 2035 North America will be an oil exporter as well. In fact, North America will be the only region in the world to move from being an energy importer, to a net-exporter. As North America secures the energy resources necessary to generate economic growth, reliable and affordable energy become a growing component in ensuring a competitive manufacturing base. In fact, we believe that as the United States embraces an energy revolution, with coinciding developments in Canada and Mexico occurring as well, energy independence will be the cornerstone in North American interaction.

For that to occur, it is imperative that we forge a new regional spirit of cooperation and create incentives as soon as possible to materialize the inspiration of progress. Today, we write a new chapter of the North American idea.



<sup>&</sup>lt;sup>1</sup> BP Energy Outlook 2035: North America Report can be found at www.bp.com/en/global/corporate/about-bp/energy-economics/energy-outlook/energy-outlook-downloads.html



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#### The State of the Transportation Sector in North America

Jose Zozaya, President, Kansas City Southern de Mexico, moderated a discussion between guest speaker Victor M. Mendez, Deputy Secretary of Transportation for the U.S. Department of Transportation, and Monica Aspe Bernal, Coordinator for the Agency of Knowledge and Information with the Ministry of Communications and Transportation in Mexico.



Jose Zozaya, President, Kansas City Southern de Mexico

In the Woodrow Wilson Center Mexico Institute and El Colegio de la Frontera Norte research project in a paper titled "The U.S.-Mexico Border: A Discussion on Sub-National Policy Options," Stephen Blank and Erik Lee share that, "The infrastructure deficit in the United States is \$1.6 trillion, according to the American Society of Civil Engineers." According to the North American Transportation Infrastructure Needs Assessment, "North America needs to invest \$2.6 trillion over 10 years to see an enhanced North American transportation system through to fruition. Investment in transborder roads and transportation systems is vastly insufficient."

While the US economy is heralded as the most productive in the word, insufficient investment

in the US highway system is a costly gamble that places trade and jobs in jeopardy. According to the Texas Transportation Institute, "Congestion on roads costs \$78 billion annually in the form of 4.2 billion lost hours and 2.9 billion gallons of wasted petrol." With North American trans-boundary commerce estimated at \$1.7M per minute, \$2.4B per day, or \$876B per year the decision to not invest \$2.6 trillion is an unnecessary risk for North American economies and must be remedied; especially when one considers that the ROI for such a venture yields between 3:1 and 50:1, according to the Woodrow Wilson Study. Investing in transportation is proven to significantly stimulate North American economies, and the time to do so is now.

North American Trans-Boundary Commerce is \$1.7M per minute \$2.4B per day \$876B per year

 $<sup>^2 \ \, \</sup>text{The complete report can be found at www.wilsoncenter.org/sites/default/files/BLANK\%20LEE\%20INFRASTRUCTURE.pdf}$ 



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#### Transportation Infrastructure



Kansas City Southern Railway system map

As Mr. Zozaya shared, one of the most important things is transportation infrastructure. If we do not prepare now for the years to come, we will be ill-prepared, as a region, to face global competition. Other regions of the world are uniting for a larger objective than self, while North America falters and struggles over politically driven issues that impede enterprise and commerce.

According to the 2013 Statistical Year Book of Mexico's Ministry of Communications and Transportation Mexico's foreign trade accounted for 45% of the total cargo handled in the Mexican

rail system. In simple terms, half of what the railroads carry crosses the border of Mexico. This is an example of the regional trade relations that exposes the need to establish bilateral and multilateral agreements that simplify and make border crossing procedures harmonious and increase the efficiency of transient operations. Transportation plays a key role in economic growth, making a shared framework designed to support public policies essential. As a region, we must collaborate as one to promote modern and sufficient transportation and communication infrastructure necessary for freight transportation systems to be efficient, safe, sustainable, and competitive while meeting the demand of domestic and international markets.

#### United States Department of Transportation

Victor Mendez confirmed that, "At the U.S. Department of Transportation, we know that a strong domestic transportation system is essential to the economic health and security of our nation. But in order to compete in an increasingly interconnected and global economy, transportation networks must align closely with our trading partners to ensure the accessibility and reliability." This interconnectedness is a priority for both the United States and Mexico who have framed a broad transportation agenda that includes economic collaboration, regulatory cooperation, and border facilitation.

<sup>&</sup>lt;sup>3</sup>A complete transcript of Mr. Mendez' speech can be found on the Department of Transportation's website www.dot.gov/briefing-room/deputy-secretary-mendez-north-american-sustainable-economic-development-summit



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The United States has a strong cooperative relationship with Mexico, and has brought state and local freight planners from both nations together to discuss freight methodologies and coordinate planning approaches.

This effort is but one component of the DOT's National Freight Strategic Plan which will become available in 2015. The Strategic Plan looks at freight movement from a multimodal approach including rail, highways, and ports, and closely aligns the States' freight plans with those in both Mexico and Canada.



Victor Mendez, Deputy Secretary of Transportation for the U.S. Dept. of Transportation

It is a comprehensive plan that will efficiently and effectively allow a new level of responsiveness to the growing needs of our expanding economies, vastly improving the way goods move from manufacturers to markets.

Furthermore, the Strategic Plan outlines transportation needs, allowing resources to be properly allocated, key corridors identified, gateways that support international trade improved, and objectives aligned for freight movement between our borders.

The new Strategic Plan is the resulting effort of the National Freight Advisory Council and DOT's leadership to create a comprehensive vision for the future of freight in America for the first time in our nation's history. It is a comprehensive plan that will be supported by the GROW AMERICA Act. The **G**enerating **R**enewal, **O**pportunity, and **W**ork with **A**ccelerated **M**obility,

\$199B National
Highway Investment
and
\$72B into Transit

Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act, or GROW AMERICA Act, is a \$302B, four year transportation reauthorization proposal that provides increased and stable funding for our Nation's highways, bridges, transit, and rail systems. The Administration's proposal is funded by supplementing current revenues with \$150B in one-time transition revenue from pro-growth business tax reform.

The GROW AMERICA Act tackles the national infrastructure deficit, improves safety, and provides funding reliably to states and localities by allocating resources to expand and improve the United States



multimodal freight network. The GROW AMERICA Act will provide \$199B to invest in our nation's highway system and road safety, and \$72B to invest in transit systems and expand transportation options, tools, and resources to encourage regional coordination and local decision making. The GROW AMERICA Act will expand economic growth, and create jobs and new opportunities for Americans. Furthermore, the Act will provide more bang-for-the-buck through innovative project finance and delivery improvements by utilizing competitive funding to spur innovation, improving project delivery and the Federal permitting and regulatory review process, and incentivizing cost effective investments; as well as providing \$4B to attract private investment in transportation infrastructure.

In other arenas the United States, Canada and Mexico are working together to address transportation infrastructure needs through the Regulatory Cooperation Councils whose purpose is to increase safety through coordinated rulemaking and standards-setting processes that address safety standards for cars, commercial motor vehicles, and the transport of hazardous materials. Tri-national rail leaders annually review new safety rulemaking developments and make sure rail safety rules are as compatible as possible.

Emerging technologies necessitate another table around which the three nations can meet to work together. As manufacturers develop Intelligent Transportation Systems that improve safety and efficiency our nations meet to discuss coordinating and sharing our ITS standards in order to maximize the connectivity of our transportation systems in the future.

Finally, there's perhaps no area that requires more cooperation and partnership between our nations than our borders. With \$1.25B in two-way trade and nearly one million people legally crossing between the United States and Mexico each day, infrastructure on our border is vital to each of our economies. Aging facilities and limited resources at our border crossings cause long, costly waits for people and goods traveling between our nations, and the need for improved infrastructure is great.

The U.S.-Mexico 21<sup>st</sup> Century Border Process is giving direction to our bilateral, interagency border facilitation efforts. Under the U.S.-Mexico Joint Working Committee for Transportation Planning, we are developing bi-national border infrastructure master plans to cover the entire U.S.-Mexico border.

Currently, numerous projects are being worked on that improve traffic flow between our nations, including: a \$735M, three-phase expansion currently underway at the border crossing in San Diego, California – the busiest land crossing in our hemisphere; the land port in Nogales, Arizona, will complete a \$187M renovation in October; and the first new rail crossing in more than 100 years will soon be completed in Brownsville, Texas. In addition, DOT is bringing



together public-private partnerships to find innovative ways to finance projects. This must be done with the demand at our border crossings increasing – and necessary projects continuing to outpace the federal and state resources to fund them – we must do more to meet the needs for new and updated infrastructure along the border.



Projected Truck Flow 2020
Source: Mexican Ministry of Transport and Communications (SCT)

#### Mexico Ministry of Communication and Transportation

Monica Aspe Bernal with the Ministry of Communication and Transportation shared Mexico's passion for expanding infrastructure, commenting that th reforms in Mexico will fuel the need for transportation infrastructure. Mexico must tackle its infrastructure deficit in order to meet the challenge of the economic growth unleashed by the recent reforms, and has an infrastructure program totaling an unprecedented development of \$115B USD.



Monica Aspe Bernal,
Coordinator for the Agency of Knowledge and
Information with the Ministry of Communications and
Transportation

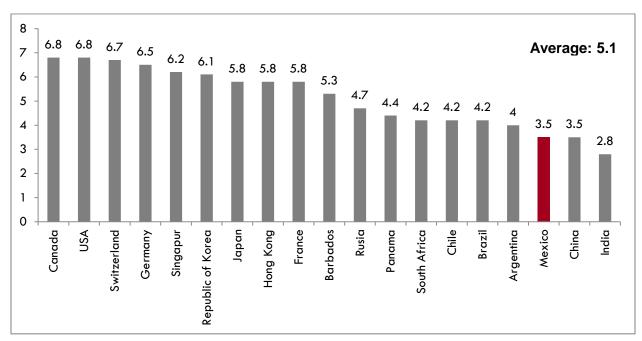
Mexico is under reform. Eleven constitutional reforms covering the three main objectives of increasing productivity in order to boost economic growth, reinforcing the rights of Mexicans, and strengthening Mexico's democratic regime.

#### Eleven Reforms

- 1. Energy reform, which comes first in terms of importance, will enable domestic and foreign firms to drill in deep water fields and shale beds. Existing regulators are being strengthened to give the certainty that investment will require in the energy sector. This is profoundly transformational for the Mexican economy.
- 2. Telecommunication and broadcasting reform will bring sustainable development through a vibrant and open telecommunication sector.
- 3. Anti-monopoly reform will create new competition and independent authorities, and increase sanctions for offenders.
- 4. Fiscal reform increases the tax collection base and closes tax loopholes.
- 5. Banking reform improves competition among banks and strengthens development by emphasizing access to credit.
- 6. Labor reform encouraging job creation through a flexible job market while establishing better working conditions for employees.
- 7. Education reform introduces an evaluation of teachers in order to increase quality standards and allows the government to regain control of the public education system.
- 8. Unified criminal justice procedures create a unified criminal justice model that ensures all people will be judged by the same procedures regardless of where within the country they reside.
- 9. The new injunction law gives citizens an effective tool to defend themselves in their fundamental rights against possible government abuse.
- 10. Political reform allows reelection of members of Congress and increases oversight of local elections
- 11. Transparency reform strengthens the right to access to public information, promoting accountability.



"The welfare loss attributed to the dysfunctional Mexican telecommunication sector is estimated at USD 129.2 billion (2005-2009) or 1.8% GDP per annum." - OECD, Review of Telecommunication Policy and Regulation in Mexico

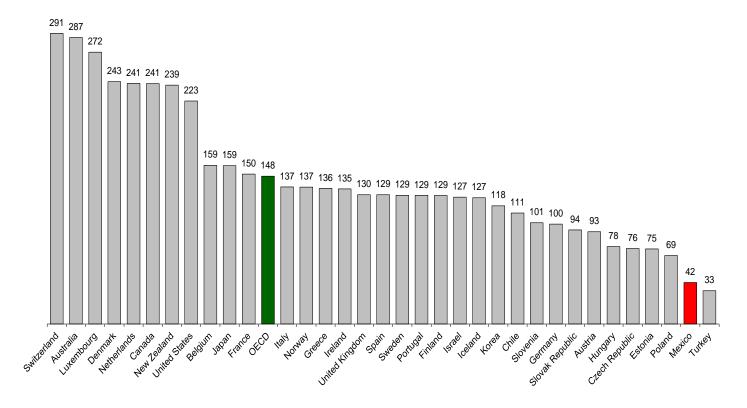


Infrastructure and digital content Network Readiness Subindex World Economic Forum

June 2013's broadcasting sector reform will halt Mexico's lagging in the telecommunication sector and will increase Mexico's ability to increase the wellbeing of its people. Mexico has historically under-performed in the telecommunication sector; with this reform, it recognizes access to information, communications, technology, broadcasting, and telecommunications services as a human right, including broadband and the Internet.



To be compared with OECD countries may be a ambitious, however the result is not different if we are compared with Latin American countries.



Public Investment in Telecommunications (per capita) 2009-2011

When compared to other countries, Mexico is second to last in terms of public investment in telecommunications, with only Turkey investing less into telecommunications and broadcasting. In addition, while Mexico is the second largest economy in Latin America, it is 20th with respect to the percent of its population that are internet users, second from the bottom, only Cuba is worse. Those statistics speak to the potential and opportunity and why now the Mexican Government is investing 14 billion (US) in the implementation of the most ambitious infrastructure project in the history of the country.













National Wholesale Backbone (including CFE's fiber optic network) Wholesale Open Access Mobile Network (700 MHz Band) Transition to
Digital
Television (TDT)

México Conectado:
Open Internet
access to all public
schools, health
centers, libraries,
parks

MexSat
Mexican Satellite
Constellation



# 6 EJES DE LA REFORMA EN TELECOMUNICACIONES:



 Fortalecimiento de derechos fundamentales.

Se amplían las libertades de expresión y de acceso a la información, así como los derechos de los usuarios y audiencias.



2. Actualización del marco legal del sector telecomunicaciones.



3. Fortalecimiento del marco institucional.

Se crean el Instituto Federal de Telecomunicaciones y la Comisión Federal de Competencia Económica como órganos constitucionales autónomos.



4. Promoción de la competencia.



5. Impulso a una mayor cobertura en infraestructura.



6. Establecimiento de una Política de Inclusión Digital Universal y una Agenda Digital Nacional.

Se busca que al menos 70% de los hogares y 85% de las MIPyMES cuenten con Internet de alta velocidad.



The Constitutional Reform regarding Telecommunications, Broadcasting and Economic Competition highlights six pillars of the telecommunication reform. First, strengthening fundamental rights. Freedom of expression and access to information are reinforced, together



with the rights of telecommunications and broadcasting service users. As a result of this reform, telecommunications are declared "services of general interest," meaning that the state will guarantee that they are provided in conditions of competitiveness, quality, diversity, universal coverage, networking, convergence, free access, and continuity.

Next, updating the legal framework of the telecommunications sector. To reinforce legal certainty, a single order will be issued to ensure the convergent regulation of the spectrum, networks and services under the single concession system. The asymmetric regulation to which the prevailing economic agents will be subject following a declaration by the regulatory body will also be implemented.

Then strengthening the institutional framework. The decree establishes the Federal Institute for Telecommunications and the Federal Economic Competition Commission as autonomous constitutional bodies. Furthermore, to ensure the rights of economic actors, courts specializing in telecommunications, broadcasting and economic competition will also be established.

Promoting competition. Up to 100% Direct Foreign Investment (DFI) will be permitted in telecommunications and satellite communications. A maximum of 49% DFI will be permitted in broadcasting, subject to reciprocity in the country where the investor has set up business. Broadcasters will be obliged to permit non-discriminatory access and rebroadcasting of their signals to pay television companies. At the same time, broadcasters have the right for their signals to be re-transmitted free of charge and in a non-discriminatory fashion by television companies.

Establishing a Universal Digital Inclusion Policy and a National Digital Agenda. The goal is for at least 70% of households and 85% of micro, small, and medium enterprises to have sufficient speed to be able to download information, in adherence to international standards.

Finally, promoting greater coverage in infrastructure. To this end, a national backbone fiber optic broadband network will be promoted, together with a wholesale wireless access shared network, based on the radio-electric spectrum of the 700 megahertz band.

Just a few weeks into the implementation of reform and the first positive outcomes have already become visible.

Mexico has enjoyed immediate foreign investment, including France's Eutelsat Communications, an operator of satellites, which purchased Satelites Mexicanos. Improvements can be found in consumer protection laws that provide users an extension on



their pre-paid phone contracts from the existing two-months up to a full calendar year. National long distance calling fees will be eliminated beginning in January. Best of all because of the telecommunication reform, the communication and transportation ministry (SCT) is implementing an ambitious infrastructure project which will create an open-access mobile network through public/private ventures.

To promote access to information, Mexico set aside \$2B (US), in order to provide 13.8 million low income households with 21-inch, smart-ready televisions enabling them to move from analog to digital television that will also provide these families with internet access. The new televisions sets will be able to connect to the Internet via a USB port. This effort will go further to close the divide in the country where currently only thirty-percent of households have Internet service.

For those with access to other mobile devices, the telecommunication reform will bring free broadband access in public schools, health centers, parks, libraries, and public buildings in the country, which will have a huge impact on public services across all sectors. Access to information has proven in nations around the globe to spur economic activity, support education advancement, and connect people, ideas, and cultures in ways formerly unimagined.





#### A Tri-National View on Energy Independence

Stephen Molina, Texas Member, Interstate Oil and Gas Compact Commission facilitated a discussion with Santiago Creuheras, Director General for Energy Technology and Innovation, Ministry of Energy, Mexico; Senator Doug Black, from the Province of Alberta, Canada, and Former Deputy Assisting Secretary of Technology and LNG Mr. Emil Pena with the U.S. Department of Energy.

The oil market is at a crossroads with multiple game-changing influences strongly affecting outcomes; from the economy to technology and geopolitics, it is time to strategically plan for energy independence and to collaborate between our nations how best to leverage North American assets in the effort of sustainability of this tri-national partnership.

#### An oil market caught between crisis and normality

The International Energy Agency reported, in their Medium Term Oil Market Report, that, "Against the backdrop of sluggish economic growth and increasing energy efficiency, the demand outlook looks more subdued, while the transformative power of non-conventional oil production technologies applied in shale and tight formations in North America exceeds earlier expectations. With downwardly revised demand projections and the promise of new supplies, the... OPEC spare capacity looks set to return to more comfortable levels than recent years. But this mild outlook (may be) partly deceptive, given exceptional uncertainty about the global economy and heightened regional geopolitical risks."

	2011	2012	2013	2014	2015	2016	2017
GDP Growth Assumption (% per year)	3.69	3.26	3.61	3.86	4.04	4.17	4.26
Global Demand	88.95	89.79	90.60	91.82	93.16	94.45	95.68
Non-OPEC Supply	52.78	53.22	53.96	54.80	55.96	56.84	57.53
OPEC NGLs, etc.	5.78	6.22	6.50	6.64	6.88	6.95	6.94
Global Supply excluding OPEC Crude	58.56	59.44	60.46	61.44	62.84	63.79	64.47
OPEC Crude Capacity	34.21	35.00	35.78	36.90	37.42	37.55	37.54
Call on OPEC Crude + Stock Ch.	30.39	30.35	30.14	30.38	30.32	30.66	31.21
mplied OPEC Spare Capacity <sup>1</sup>	3.81	4.65	5.64	6.52	7.09	6.89	6.34
Effective OPEC Spare Capacity <sup>2</sup>	2.81	3.65	4.64	5.52	6.09	5.89	5.34
as percentage of global demand	3.2%	4.1%	5.1%	6.0%	6.5%	6.2%	5.6%
anges since December 2011 MTOGM							
Global Demand	-0.05	-0.48	-0.93	-0.88	-0.68	-0.54	
Non-OPEC Supply	0.10	-0.47	-0.12	0.27	0.30	0.76	
OPEC NGLs, etc.	-0.02	-0.14	-0.19	-0.24	-0.34	-0.42	
Global Supply excluding OPEC Crude	0.08	-0.60	-0.32	0.03	-0.04	0.35	
OPEC Crude Capacity	-0.44	-0.48	-0.61	-0.14	-0.40	-0.53	
Call on OPEC Crude + Stock Ch.	-0.13	0.12	-0.61	-0.91	-0.65	-0.89	
Effective OPEC Spare Capacity <sup>1</sup>	-0.31	-0.61	0.01	0.77	0.25	0.36	

<sup>4</sup> http://www.iea.org/media/presentations/MTOMR\_2012\_FINAL\_OVERVIEW.pdf



#### North American Energy Independence

Mr. Molina opened the discussion group on the energy powerhouses of North America (US, Canada, and Mexico) by encouraging the US to stop hindering the importation of Canadian and Alberta Oil Sands derived petroleum, urging the US to collaborate closely with Mexico and aid them however they can in their development of their natural resources and infrastructure, and pleading with the US to encourage the development of US reserves both on and off shore. He commented that it is well known that there are reserves available for all three nations to achieve energy independence now, and stop relying on unfriendly regimes to supply so much of the area's hydrocarbon needs. He also offered that there cannot be a negative connotation in saying that North Americans deserve energy independence.



Stephen Molina, Texas Member, Interstate Oil and Gas Compact Commission

North American Energy Self-Sufficiency is the future. The time is ripe, with Mexico opening its energy industry to foreign investment, for the three countries to make it the focal point for cooperation between themselves. The time is ripe for integration, cooperation, unity, and a regional focus on energy. The potential is unlimited.

#### **Population**

Today 114 million 2027 - 130 million

#### Cities

Today 384 Cities 2027 - 489

Urban Drivers
Today 29M
2027 63M

While the potential is unlimited, as Ricardo Martínez shared in the Mexico Oil and Gas Technology blog, it will be quite a challenge to accomplish in a relatively short span of time. While Mexico has had several initiatives similar to the current reform, none have been this extensive or widely exalted. Perhaps because former editions failed to properly address concerns of transparency or instill mechanisms to verify the paper trail of monies deemed for social and economic programs. The proposed new regime, however, ensures transparency throughout the entire earnings process. According to the new framework, incoming royalties and other fees paid will be reported to a selected technical committee comprised of four independent members apart from SENER, SHCP, and the Mexican Central Bank, which should assist in eliminating corruption of information. After 70 years of unaltered dominance, it will be an interesting time in Mexico's history as the nation's oil and gas industry ends PEMEX's absolute reign as the sole operator of the country's hydrocarbon assets.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> http://www.oilandgasmexico.com/2014/08/12/fast-forwarding-changes-to-mexicos-oil-and-gas-industry/



U.S.-Mexico Chamber of Commerce -- PO Box 14414 Washington, D.C. 20044 U.S.-Mexico Cultural & Educational Foundation -- 211 Mandalay Canal, Irving, TX 75039

#### Mexico

Santiago Creuheras-Diaz, Director General, Energy Efficiency and Innovation, SENER, is certain Mexico is up for the challenge of implementing reform and outlined the initiatives and laws passed April 2014.

Placing the need for reform into perspective, in 2010, Mexico's population was close to 114 million. It is estimated that in 2027 that population will grow to 130 million. In addition, while there are currently 384 cities in Mexico, by 2027 that number will jump to 489, with 88% of Mexico's people living in an urban population setting. This population increase will drive vehicle usage from 29 million today to 63 million vehicles by 2027.

These interesting facts become startling when we realize that by 2019/2020, Mexico will move into an energy deficit position. It is this dramatic position that finally spurred strong reform that boldly rewrites and prepares Mexico for the future.

Act		The Nine initiatives			
1	Hydrocarbons Act				
2	Foreign Investment Act	Hydrocarbons Decree			
3	Mining Act				
4	Public – Private Association Act				
5	Electricity Industry Act Electricity Decree				
6	Geothermal Energy Act	Geothermal Decree			
7	National Waters Act	Geothermal Decree			
8	National Agency for Industrial Safety and Environmental Protection in the Hydrocarbon Sector Act	Agency Decree			
9	Petróleos Mexicanos Act	State Owned Productive			
10	Comisión Federal de Electricidad Act				
11	Federal State Owned Companies Act	Enterprises Decree			
12	Public Sector Purchasing, Leases and Services Act,				
13	Public Works and Related Services Act				
14	Coordinated Energy Regulators Act	Regulators' Decree			
15	Federal Public Administration Act	negulators becree			
16	Hydrocarbon Act				
17	Federal Duties Act	Fiscal Decree			
18	Fiscal Coordination Act				
19	Mexican Oil Fund for Stability and Development Act	Mexican Oil Fund Decree			
20	Federal Budget and Fiscal Responsibility Act	Budget Decree			
21	Public Debt Act	Duuget Deci ee			



Entitlements, or the right to explore and extract hydrocarbons on behalf of the State, were allocated to Pemex and State Productive Enterprises.

Pemex will become a State Productive Enterprise. This new legal concept will provide them with technical and management autonomy, while maintaining the State's ownership. Operating flexibility and budget autonomy, SOPE will be able to contract debt and set wages for the company, as well as for its affiliates and subsidiaries, limited only by debt and salary ceilings set by Congress. Adding transparency on information disclosure, SOPEs must reveal financial information in the same manner as if they were public companies (risks, relevant events, and assets), as well as comply with the Transparency Act. The State will assume the role of owner without directly intervening in its administration.



Santiago Creuheras-Diaz, Director General, Energy Efficiency and Innovation, SENER

#### It will:

- (1) Appoint the Board and CEO and Board of Directors
- (2) Put before Congress a dividend proposal
- (3) Evaluate the performance of the companies and of its top executives.

Exploration and Extraction Contracts were signed with Pemex, in association with other companies, or to private companies.

Contracts were awarded through public bidding processes to the party that offers the best terms for the State, who retains a direct participation up to 30%; the owner of a mining concession may now obtain a contract, without the need for the bidding process, for the gas associated with his coal mine and in production. Mining concessioners will also be able to obtain a contract to extract the Coal Bed Methane that lies within the carbon mine already in production. Furthermore, booking of expected profits for accounting and financial purposes will be possible only if they expressly state that all hydrocarbons in the subsoil are owned by Mexico. Trans-boundary Hydrocarbon Reservoirs' Oil/gas marketing decision is made by each counterpart, and contracts are to include a minimum of 20% direct participation from Pemex in the areas where these reservoirs can be found.

Industrial Security, Environmental Protection and Exploration, and Production all underwent radical changes such that oil and gas resources will now be available for bidding the equivalent of 38 years of current production. Refining and Natural Gas Processing and the construction and operation of refineries and petrochemical centers provide space for private investment. Currently, in Natural Gas, 29% of consumption is imported; in Gasoline, 45% of consumption is imported; and in Petrochemicals, 75% of consumption is imported.



Transportation, Storage, Distribution, and Commercialization will involve construction and operation of pipelines and storage terminals. Service opportunities in the extraction of the hydrocarbons include maintenance of existing infrastructure, pipeline construction, platform construction, and other services to the industry.

The recently passed Electric Industry Law establishes the regulatory framework that will guide Mexico's electric sector, reserving, for the State, the strategic areas of planning for and control over the National Electric System, as well as the transmission and distribution of electricity, and the opening of power generation and commercialization to competition. Electricity transmission and distribution will continue to be offered by the State through the Federal Electricity Commission (CFE, a State Owned Enterprise), which will be subject to regulation

Mexico is one of the top ten largest oil producers in the world. Although production has declined, recent reform could reverse this trend.

- U.S. Embassy, Mexico

designed to incentivize the grid's expansion and efficient operation. SENER will have the ability to mandate transmission and distribution grid expansions, and the Energy Regulatory Commission (CRE), will be in charge of designing and issuing the corresponding regulation.

The new legal framework allows for a range of contract types between the State and private entities, so these can contribute with their technology and expertise to the expansion and improvement of the transmission and distribution networks. This change will give CFE an important tool to address energy losses and increase the overall energy efficiency.

The new Law contemplates the classification of users in qualified and basic service users, according to their level of consumption. The qualified users will be able to purchase energy in the wholesale electricity market, or from a supplier at previously freely established rates, while the basic supply users will purchase energy from CFE at regulated rates. CFE, a State Owned Enterprise, will buy energy through auctions to guarantee that minimal costs are being charged to end users.

The responsibility to meet the electricity demand at the lowest cost, while guaranteeing the stability of the network, will be placed under the authority of the *Centro Nacional de Control de Energía* (CENACE). Under its status as a decentralized public entity, CENACE will coordinate the wholesale electricity market and will propose, to *Secretaría de Energía* (SENER, Ministry of Energy), the expansion of the transmission grid.

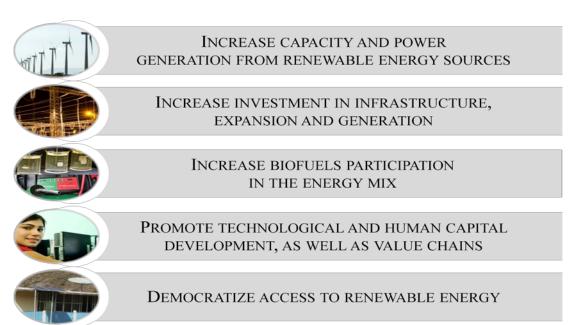
Wholesale energy prices will be negotiated freely between generators, retailers, and qualified users. The Executive will maintain its authority to establish the rates for basic supply users as well as the corresponding subsidies. Additionally, the CRE will regulate the transmission and distribution rates.



The current law states that the activities of the electric industry, such as generation, transmission, distribution, supply, and commercialization, must be carried out under a strict legal separation, in order to promote open access and the efficient operation of the sector.

In order to fulfill the constitutional mandate for sustainability in the electric industry, the Electric Industry Law establishes obligations by which the qualified users and retail suppliers must acquire clean energy certificates, ensuring the demand for clean power generation.

To bring electricity to all Mexicans, the Electric Industry Law mandates the creation of a Universal Electric Service Fund to finance the electrification of rural communities and marginalized urban areas. The Fund will be financed by the surplus resulting from the energy losses' management in the electric market, ensuring the availability of resources to fund electrification projects.



Energy Efficiency Potential brings many opportunities in buildings and transportation, from building standards, to standards for lighting systems and equipment, and even to standards for glazing systems. Mexico has now developed programs and strategies, as well, for sustainable use of energy in which they try to develop it as we developed the Renewable Energies for Sustainable Development in Mexico program in 2009.

There are ample investment opportunities in terms of efficient technologies. As we speak, the Secretary is announcing the light substitution program for rural areas. The government will be exchanging almost 40 million light bulbs in rural areas in Mexico. Mexico has one of the greatest records of substitution of technologies and will be working with SME's to exchange technologies, and has developed a financial program to provide a loan up to \$30,000 to exchange inefficient technologies and sustain the market through energy efficiency.

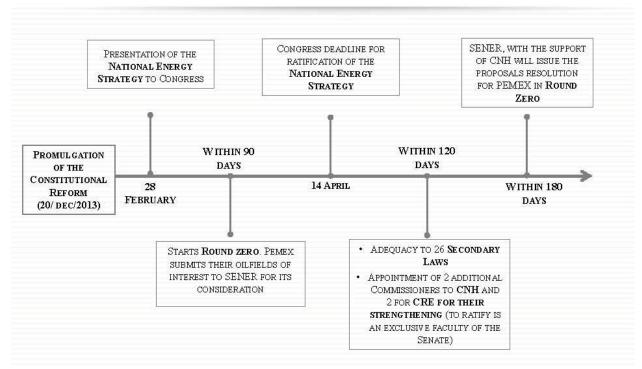


In terms of Research and Developing, development, including Human development and training, is funded by the Sustainable Energy Fund, which encourages:

- Energy efficiency: increasing the productivity and production of the sector and encouraging more responsible and intelligent consumption;
- Energy security: generating the capacity and resources needed to ensure power supplies for the entire country, and;
- Energy sustainability: renewable energy sources and the use of clean technologies to reduce the environmental impacts associated with energy production and consumption.



### TIMEFRAME FOR THE IMPLEMENTATION OF THE ENERGY REFORM



"Though Mexico has some of the world's largest and most accessible offshore oil fields, its shale resources are even bigger." - Leon Alvarez, American Association of Petroleum Geologists, 2014

- Mexico is the 9<sup>th</sup> largest oil producer in the world
- Mexico ships exports to the US 850,000 barrels of crude oil a day to be processed
- The US is Mexico's #1 supplier of gasoline and natural gas.
- Mexico has the 6<sup>th</sup> largest recoverable shale gas reserve in the world





Mexico's Oil & Gas Provinces





#### Canada

Senator Doug Black applauded Mexico on its efforts to bring radical reformation. While Canada has not undergone reform, within the last few years it has awakened, as if from a deep sleep, to the realization that the world environment has drastically changed from years of old and as has launched into furious action to ensure its prosperity can be maintained.

The oil and gas sector in Canada is \$160B a year. The oil and gas industry is ten times the size of any other resource industry in Canada, including agriculture. Canada is increasingly an energy nation and growing exponentially.



Senator Doug Black

#### **Natural Gas**

Canada is the third largest producer of natural gas in the world. At the end of 2006, Canada's proven natural gas reserves were 58.2 trillion cubic feet. Canada is also the second largest exporter of natural gas in the world, after Russia. Currently there are twelve proposals for exploration; of these, one to three will advance over the next five years.

#### Hydropower

Canada is the third largest producer of hydroelectricity in the world, after China and Brazil. The resource is massive. Canada is all about water, and has tremendous capacity to double the production of hydroelectricity.

#### Oil

Canada has the second largest proven resources of oil in the world and the largest estimated oil reserves. In addition, Canada is the fifth largest oil deposits of Alberta. Canada's oil production will more than double in the next twenty years, rising from 3.2 million barrels per day to 6.7 mb/d, creating an additional 800,000 jobs.

#### Coal

Canadian coal reserves are the fifth largest in the world, making Canada a mid-sized producer, but 90% of Canadian coal exports are metallurgical coal, the most valuable coal in the world.

#### **Uranium**

Canada is the second largest producer of uranium in the world, only recently overtaken by Kazakhstan. Canada exports almost all of its uranium, as well as the technology necessary to work with uranium.

#### **Issues in Paradise**

But there are issues in paradise. The North American oil and gas equation has changed substantially over the last 18 months. Canada's exports to the U.S. in terms of oil and gas account for 98-99% of all exports, and the United States is working towards self-sufficiency in oil and in gas, and that pattern is continuing to increase. So Canada is left in the position of having only one customer who is on the verge of not necessarily needing its product. Thus the mad scramble is on to develop pipelines to the west, to the south, to the east, and even to the north, if global warming continues. Market diversification is the reality and focus of Canada. But it is not so simple, as the environment in the US has changed.

As the American environment was changing, pipeline building faced domestic obstacles that proved extremely problematic. The majority of our resources lie in the oil sands. The oil sands, for many people in the western world, are considered controversial. The reason for this is that the carbon footprint per barrel is higher by far than conventional oil. Environmental groups throughout the United States are committed to stopping oil sands production. To stop production, they merely have to stop the pipelines, as this will halt production. Possibly hundreds of millions of dollars are being funneled from US foundations to various aboriginal groups who are, as a result, extraordinarily well funded and extraordinary effective at endeavoring to shut the oil sands down. The oil industry has not been as effective as it can be in getting the message out.

In June of 2014, the Supreme Court of Canada ruled that "First Nations" lands occupied in some way over the last hundred or so years, and the lands not covered by trees, be returned to them; they effectively have an ownership right of those lands. So Exxon-Mobil must now not only deal with the government of British Columbia, but also with any number of aboriginal groups in the area in which it wishes to do work. If pipeline companies want to extend their lines, there are over 100 aboriginal groups they must now deal with along the line. It is not that it cannot be done; it is that it is now exponentially more complicated.

# The Keystone XL Pipeline will deliver 830,000 barrels of oil per day. What does that mean for the everyday energy consumer? 15,000,000 million gallons of gasoline per day.

The third issue is that Canada has a proposal for a pipeline leaving Canada, the Keystone XL pipeline, producing an additional 850,000 barrels a day running from Alberta to the Gulf of Mexico and there appears to be a governmental official in the US who is opposed, or, if not opposed, at least reluctant to move forward with approving the proposal. The problem is that that official is the President of the United States. This problem has caused an unusual chilling in Canada's relationship with the U.S, despite the facts that the U.S. is Canada's closest friend and ally, and her largest trading partner.

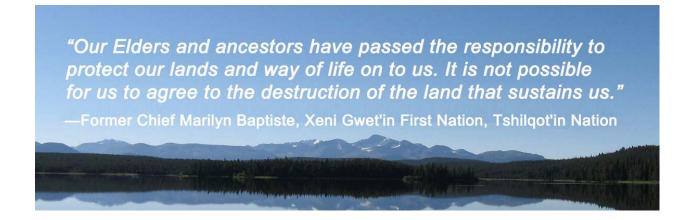
As these pipelines are delayed, Canadians are using the railway to get their product to market. In 2008, no oil moved by rail in Canada, but by 2016 there will be over 700,000 barrels moving by rail per day. There are trains of 100-120 cars rumbling across Canada and the US. This is considerably dangerous than more pipelines: it is more negative to the is displacing environment, and movement of coal, uranium, and wheat. This is not a sustainable solution.



To solve these issues two fundamental understandings must be embraced. The energy industry must recognize that First Nation people are their partners. They are not a community who must be "dealt with," they are one who is our new partner. Mechanisms must be found to allow First Nations to have equity stakes in growth, as must meaningful involvement to ensure that aboriginal people find employment, that there are educational opportunities, and that there are health attachments. There is no other way around it.

In terms of pipeline security, continual environmental enhancement, and clean up capabilities, Canadians must ensure that they are not simply one of the best, but the best in the world.

Canada's aboriginal partners' views as stewards of the land go beyond Western cultural views. Their obligation to generations behind them is to protect the assets they have been given and the species of the land alive today, particularly in that environment, salmon. Unless Canadian industries can signal in a meaningful way that they will protect the lands and the water, the aboriginal First Nation people – who now, because of the action of the Supreme Court of Canada, effectively own their lands – will not be doing business..

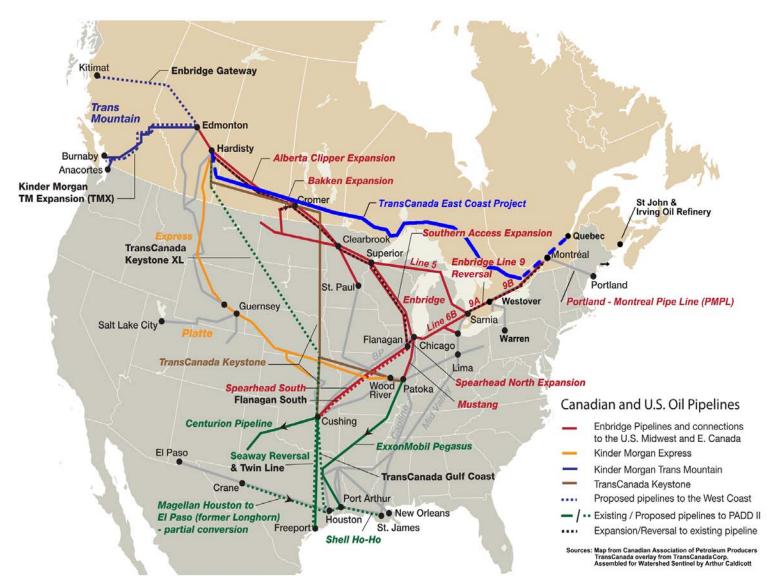




The next step is developing a North American strategy around energy because that is what needs to be done. Mexico deserves incredible respect and support for this bold initiative it has taken. The US is the US, and will deliver on the promises it makes. Canada will have to continue the work currently underway. If Canada and the US were to align their interests, the US would not need to import oil from Saudi Arabia and Venezuela or other restrictive nations with repressive regimes.

Energy strategy for the Americas is a growing critical concern and will be developed in the coming future. Currently there are nine new pipeline applications proposed. The volume proposed of the four largest includes:

Northern Gateway
 Keystone Project
 Energy East
 Kinder Morgan
 525,000 barrels/day
 850,000 barrels/day
 1.1M barrels/day
 600,000 barrels/day





#### United States LNG

Emil T Pena; Former Deputy Asst. Secretary Technology and LNG, U.S. Dept of Energy.

As T. Boone Pickens has said, "America's dependence on OPEC oil forms the intersection of the three most critical issues America currently faces: the economy, the environment, and our national security." 6

The US faces rising global demand from emerging economies as well as increased crude oil production from offshore drilling and onshore natural gas production. The pressures from regulations and alternative energy growth in global events like the Arab Spring and also, now, the Russian aggression, have huge impacts on North America.

New technologies have allowed for increased exploration of previously unattainable resources.



Emil T Pena; Former Deputy Asst. Secretary Technology and LNG,, U.S. Dept of Energy.

One of the ongoing responsibilities of the US Department of Energy (DOE) is to commercialize the technologies that have come out of laboratories in the best and most efficient ways, while still making a little money for the Universities conducting research and the developers. Certainly today some of the things we are seeing are downhill technologies making huge advances, and Mexico is very keen to use these technologies to increase production by over forty percent. Amazing figures: the payback on these technologies is very fast. In the oil and gas fields we have a saying, "Good enough," but I'm here to tell you that these technologies do not leave our energy companies simply "Good enough," because investors are coming back out just to take advantage of the technologies being utilized by these companies.

On the clean-up side of the coin, other technologies that the DOE has developed are introducing very efficient ways to separate water and oil, and some of the fine tailings and mountains of petroleum coke being produced in Canada can be very efficiently handled. We are on this new frontier, using these new technologies, to move things along.

Part of this discussion is also going to be on LNG and gas-to-liquids technologies that maximize values of natural gas. The abundance of natural gas has changed equations for the US in a hemispheric way, and is producing many jobs, as well. So, now, it is not only the engineers and lawyers that are needed in the fields, but also technicians

<sup>&</sup>lt;sup>6</sup> http://www.pickensplan.com/



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### Monthly Oil Numbers (April 2014)





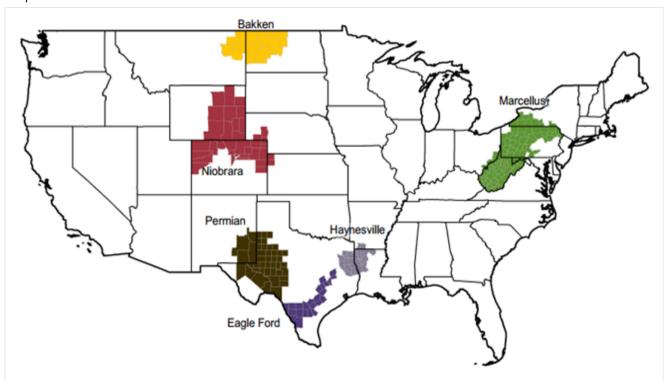


**Barrels** U.S. = 284 Million

Imported Oil % from Imported by the Foreign Countries = Overseas = \$30.6 51%

Money Billion

Major U.S. Fields



Source: EIA, Drilling Productivity Report

On the topic of the workforce, the US energy market is not just looking for engineers, who are constantly in demand, but also for technicians. For education today, then, not only are degrees valuable but certifications really do matter, and really will secure jobs.

A certified welder, in Texas, can make \$4,000 a week, nothing to take lightly. Those are huge numbers, and there is more demand on the way for these types of vocations.



Crude oil makes up 58.4% of the market, while natural gas represents 41.6, the United States currently sends 59% of its oil and gas exports to Canada and 19% to Mexico, while still shipping out some of its production. Texas, Oklahoma, and Louisiana obtain the largest amount of industry revenue in the continental United States.

Back in the eighties, ARCO got involved in South Texas, with tight sands gas. The vertical production of conventional natural gas, at that time, was 88% -- unconventional made up the remaining 12%. To remedy this, Texas did away with the severance tax forgiveness, because it is harder to reuse gases than oil, and over the next three years, in the areas like Laredo, East Texas, and West Texas, the numbers were flipped.

Now, because of that incentive, 88% of the vertical production of natural gas is hard-to-produce gas, and the boom shows no signs of slowing. Shale energies are still ranked at the top level, not only because of their abundance in the United States but also because of their profound global impact, as the events of 2014 continue to demonstrate.

America's shale gas and "tight oil" are changing the global energy markets, reducing Europe's competitiveness and meaning that the U.S. and China's overall manufacturing competitiveness



are matched.

Looking at what's going on in Iran today, they would have never been in the nuclear bargaining table if it had not been that the US were so dependent upon them, nor if the US were producing more crude and more natural gas. Instead of looking at an East-West access for energy out of the US, it can now look at a North-South access between Canada, the US, Mexico, and Panama, as well as the rest of Latin America.

The major US and Mexico shale fields today do not stop at the river. The Lobo goes all the way under Texas and into northern Mexico, and there is a lot of promise there for Mexico to produce more natural gas than they are doing today in their fracking. Speaking of fracking, the unconventional revolution in oil and gas did not come quickly.

Hydraulic fracking has been around since 1947. It was not until 2008 that its impact on the US energy supply became notable, and, since then, the industry has developed quickly with shale gas, accounting for more than 44% of the total U.S. natural gas production.

Given the abundant supply, US gas prices have fallen to a third of those in Europe; to give a little global perspective, Asia pays five times as much. Shale gas is boosting US oil production, as well, with an output of 56% since 2008. An increase that, in absolute terms, is larger than the total output of each of the twelve OPEC nations.



The U.S. will surpass Russia and Saudi Arabia as the world's top oil producer by 2015, and be close to energy self-sufficiency in the next two decades, amid booming output from shale formations, the International Energy Agency reports.



Ten years ago, it was expected that the US would be importing large volumes of liquefied natural gas, or LNG, to make up for anticipated shortfalls in natural gas production. Nobody would have thought, at that time, that the US would be exporting LNG. Now the US is not importing any gas, and saving \$100B on its national import bill. United LNG provides 100,000 jobs as shown by a Houston-based analysis firm that includes 18,000 permanent jobs. And there are 23 projects in the queue in the United States.

### Natural gas is a way of keeping peace.

Offshore of Louisiana the US has applied for a licensee to export 24 million tons per year. Pakistan, India, Ukraine, and South Korea, and Japan provide a global market for this product. Doing the math backwards, that is 3.3 billion cubic feet of natural gas per day that we are scheduled to liquefy and export.

Looking at countries like India and Pakistan, they want to get their people back to work, and enjoy a good lifestyle and consistent access to electricity, and, lacking natural gas that becomes a difficult objective to achieve. Providing access to power to regions of the world is a great opportunity.

US production rates are displacing Russia, who uses natural gas, or the lack thereof, as a weapon.

Japan is getting into the act, replacing the electricity loss following the tsunami a few years ago and an almost total shut down of nuclear power. Many other countries are reassessing their own energy policies as well in light of this unconventional light energy revolution.

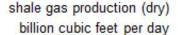
Throughout Europe, industrial leaders are becoming increasingly alarmed by their enterprises' loss of competitiveness to factories that use low cost natural gas; consequently, manufacturing is shifting out of Europe and back to North America. Germany is a prime example; over half of their GDP relies on exports and their energy trajectory is increasing, so their GDP will continue to deteriorate.

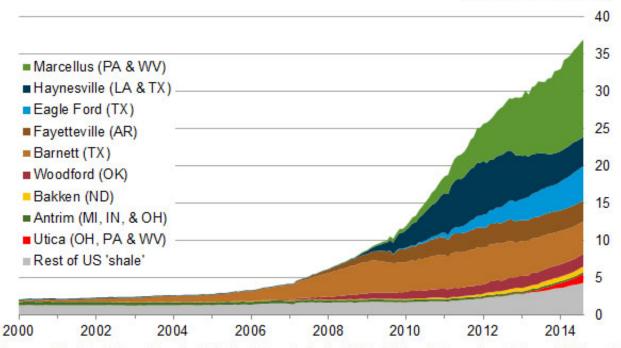
American shale is changing the balance of competitiveness in the world economy, giving it an unanticipated advantage. Indeed, the inexpensive natural gas is fueling a U.S. manufacturing renaissance. Companies are building new plants at existing facilities, leading to more and more employment. Where, ten years ago, jobs were shifting offshore, factories and jobs are now returning to the United States.

The rising US output combined with greater automobile fuel efficiency will continue to reduce its foreign dependency. If the US still imports oil in the future, it will come probably from Canada, and – factoring in the new technologies and new participation in Mexico's shale production, and Canada's proposed pipeline – North America could hypothetically gain utter independence.



# U.S. dry shale gas production





Sources: EIA derived from state administrative data collected by DrillingInfo Inc. Data are through August 2014 and represent EIA's official shale gas estimates, but are not survey data. State abbreviations indicate primary state(s).

The shale energy revolution provides a new source of resilience for the US and enhances America's position in the world. The emergence of shale gas, tight oil, and innovation can change the balance of global economic and political power.

LNG is where the big developments are happening and occurring today. Eventually, the administration will be gone and there will be a rapid call to arms to finish up existing projects and continue projects that have been wait-listed. LNG is clearly the game changer for the US.

Why is that? Why not somewhere else? It is largely due to the design of the system in the United States that dictates that it has private mineral ownership under its own land. In fact, this administration decreases federal land exploration and production. On the private side, US energy companies have been leasing multiple acres and obtaining more areas to frack, so the revolution is still occurring. It will continue, but in order to take full advantage of it, more markets must be opened, so that more natural gas might be sold.

### New Growth in Panama and the Arctic

Former Ambassador Juan Sosa and Dr. John Higginbotham brought interesting insight on how the two regions are setting the tone of change miles away from the Continental United States.

### Panama Canal

Ambassador Sosa launched the conversation by reporting on the progress of the current Panama Canal expansion. The Panama Canal currently accounts for five percent of world trade.

When the Canal was built at the turn of the 20th century, it could easily accommodate any vessel then extant, even the mighty Titanic; at 27m wide, it could fit with plenty of room to spare. Flash forward one-hundred years and companies are building ships a quarter of-a-mile long and capable



Juan Sosa, Former U.S. Ambassador to Panama

of carrying up to 18,000 containers. These "Post-Panamax" and even "Super-Post-Panamax" ships are in heavy use around the world today, making up 16 percent of the container fleet and accounting for 45 percent of its capacity, and according to an Army Corps of Engineers July 2012 report, "Those numbers are projected to grow significantly over the next 20 years."

With the current Canal only 110 feet wide this has created a bottleneck that ultimately led Panama to approve in 2006 \$6B to renovation and expand the Canal. The objectives of the Canal expansion are to:

- achieve long-term sustainability and growth for the Canal's contributions to Panamanian society through the payments it makes to the National Treasury;
- maintain the Canal's competitiveness as well as the value added by Panama's maritime route to the national economy;
- increase the Canal's capacity to capture the growing tonnage demand with the appropriate levels of service for each market segment, and;
- make the Canal more productive, safe and efficient.

In transit last year, the Panama Canal carried 330 million tons of cargo, two-thirds of which came from or went to the United States, making the US the number one user of the Canal. China is a close second, Chile the third, while Japan has dropped to fourth place with Colombia and South Korea not far behind. For emerging economies of South America it is important to note that Panama is becoming the second largest trade route.

Far from becoming obsolete, the Canal services 55 percent of west coast ports, accounting for 45 percent of all west coast trade – up from 35 percent a decade or so ago.



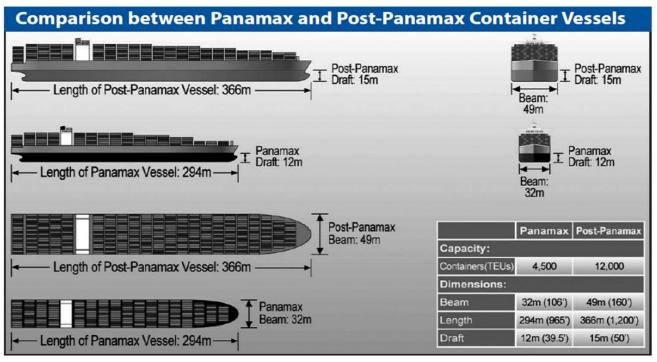
Gaining market share prior to expansion indicates future growth. In a matter of three or four years after expansion, it is estimated that the Panama Canal will be the number one transit for Far East goods to reach America as well, incentivizing eastern seaboard ports to undergo improvements that will make them compatible with the Panama Canal, dredging down to create a 50 foot draft and expanding entries to 130 feet wide. Miami, Charleston, Savannah, Norfolk, Baltimore, and New York have more than \$80B in improvements currently underway in order to capture the increased capacity of 13,000 ships that will soon pass through the Canal.

### **Panama Canal Trivia**

- 40 ships cross daily
- 5,000,000 cubic yards of concrete
- 52M gallons of water in each lock
- 7,872 miles saved for cargo travelling from New York to San Francisco

Texas has a serious challenge in what to do to improve its own competitiveness in this arena. The only port with the potential, necessary approvals and money to dredge to 50 feet is Freeport. Yet, Freeport does not have the infrastructure to handle large tonnage. Even with a brand new terminal and a major shipping line, the infrastructure is not there to support the projected 1.5 to 2 million additional containers a year that would come through its port on its way to Houston, Dallas, and up to mid-America.

The logical port to undergo improvements would have been Houston, but Houston is not considering renovating to accommodate post-Panamax ships. This is largely due to environmental concerns. For Houston to be able to open itself to Post-Panamax traffic it would require dredging the channel 50 feet down and up to 30 miles out where pipelines currently lay, costing the Port of Houston Authority over \$1B to make the necessary improvements and renovations.



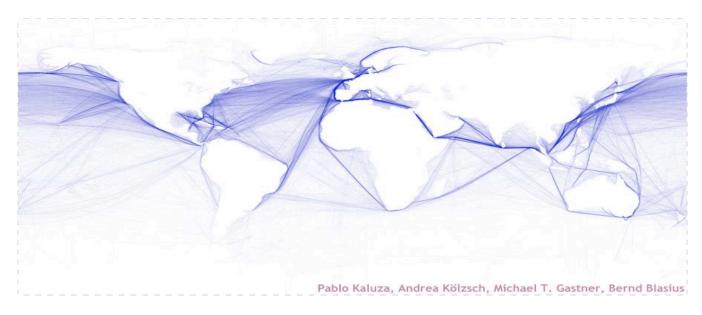




The new Canal lock will be complete December 2015 and operational the first quarter of 2016. Now 180 feet wide with a 50 foot draft, the new lock will bypass the second lock completely and double the capacity of the Canal. This will allow Panama to welcome ninety percent of the LNG fleet, making the Canal a natural distribution port to reach the islands and South America.

Until then, 6,000 employees continue to work on the construction and have completed 75 percent of the locks, preparing for a new day in escalated trade. Yet, challenges remain. How long, for instance, can Panama afford to keep widening its canal as ships get continue to grow in size? It is estimated that in another thirty to forty years, even this expansion will be outdated and the nation will again have to undergo expansion efforts or face decreased capacity. Indeed, there are, today, many vessels already too big for the new locks.

The Canal requires fresh water to operate. Climate change experts question whether the rainfall in Panama will persist at levels necessary to keep the canal operational. The present Canal loses 55 million gallons into the sea each time its gates are opened. The expanded Canal will lose 100 million gallons. To help offset this, water basins were built along the Canal in order to capture 60 percent of the water formerly lost. While a large quantity of water can now be recovered and recycled, for how long can the nation afford to lose 100 million gallons a day?



### The Arctic Zone

Of tremendous consideration is whether the melting of the polar ice caps might enable a new, rival navigational route through the Arctic to open up. For years, Russian, Canada, Scandinavian countries, and the United States have looked at the Northwest Passage. Dr. John Higginbotham, Senior Fellow, Carleton University and Center for International Governance Innovation, Arctic Circle Study brought insight into the viability of the Northwest Passage and the effects of global warming on trade.

Higginbotham shared how his first connection with the northern third was learning, in 1969, of the SS Manhattan, a ship that tested the Northwest Passage as a way of exporting petroleum from Prudhoe Bay where those petroleum resources were just being established. Outfitting the SS ship with an icebreaker bow, the crew attempted to plow through the Northwest Passage,



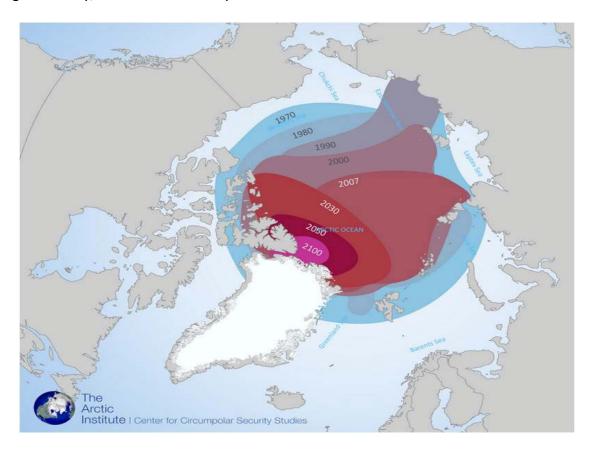
Dr. John Higginbotham, Senior Fellow, Carleton University and Center for International Governance Innovation, Arctic Circle Study



unfortunately becoming stuck along the way. Seen as a failed experiment to export Alaskan oil through the Northwest Passage, resources were leveraged to build the Trans-Alaskan pipeline, but investors and nations kept a close eye to the North and waited to see if, one day, a new route would emerge.

35 years later and we see another ship leave out of Vancouver, delivering metallurgical coal, and make it through the passage to deliver its cargo to a port in Finland. What could have made this possible? The melting of the Arctic ice caps. The melting of the ice caps is lengthening the trade season as it continues to lessen the density of the ice in the arctic.

This gradual melting of the polar ice caps is surely one of the most important geographic and physical realities now in the world. The Arctic is becoming thinner with less volume of ice, probably losing half of itself in the last 35 to 40 years. If this trend continues – and the IPCC (Intergovernmental Panel on Climate Change) and other authorities on the subject believe it will – it will create enormous excitement in various shipping and business communities, the oil and gas industry, because it will vastly increases access.



For whatever reason, global warming concentrates its effects in the North Pole region. Not in the South Pole, but in the North Pole we see three times a greater impact than anywhere else in the planet. What happens to be in the North Pole? Only 15-20 percent of the world's unexplored oil and gas deposits are in the arctic region. Russia has an enormous continental



shelf and we will see that Russia has very dramatic plans to exploit the resources there once the area opens.

While we cannot yet say the Northwest Passage is open for business – for it certainly remains very dangerous most of the year with search and rescue services poor – the promised economic impact is sure to drive future exploitation. Looking thirty to forty years out, the Northwest Passage is a viable alternative to the Panama Canal; perhaps not in twenty years, but long-term it will impact trade routes significantly.



Russia certainly believes so as well. Putin has put enormous national resources into the northern sea route over the last decade. The US put one commercial ship through the Northwest Passage last year. In comparison, Russia put 50-60 ships through the passage and hundreds of ships are now trafficking through that area.

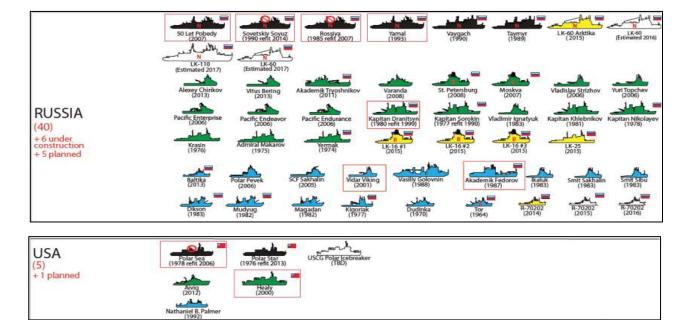
Leveraging the Arctic Zone is one of President Putin's main objectives for Russian trade in the 21st century. The advantageous of the northern sea route include a significantly shorter route than through the Suez Canal, saving time, fuel, and distance, which carries the benefit of severely decreasing CO2 omissions.

To prepare for the northern extended season and opening of the passageway, Russia has established search and rescue stations along the northern sea route. Of concern for national security is that these stations can transition into bases for Russia's northern fleet increasing



Russia's influence in the Arctic Ocean. In response to this, the US Navy has expanded US surface capabilities in the Arctic Ocean over the last ten years.

The icebreakers of the world will give you an idea of where Russia is putting its efforts. The US has five icebreakers with one more planned and splits the nation's icebreakers between Antarctica and the Arctic. Russia has 40 icebreakers and its fleet operates using nuclear reactors that do not have to be refueled but once every seven years; all are designed for convoy duty, that is to assist larger ships through difficult passages, and the Russian LK-60 Icebreaker will make it possible to use the Northern Sea Route all year round.



Russia is not doing this alone. They are working closely with Scandinavian countries and have reached a maritime boundary agreement with Norway. Canada, Japan, and Korea signed, this summer, a contract to build nine Arctic LNG icebreaker tankers for Russia's Yamal project.

The North American arctic marathon is on! When, not if, the passage opens, it will be a shorter distance from Seattle to New Jersey through the Arctic Ocean than it is to go through the Panama Canal. To prepare, America must begin to plan now for the infrastructure investment that will be required to capitalize on northern routes. Furthermore, it must begin to address political motivations that slow or halt sustainability efforts. Alaska is planning a new natural gas pipeline to its southern coast. We all know oil development moves slowly in Alaska because of political and environmental reasons, but with the race for self-sufficiency and energy already underway, and the passages north opening up, perhaps it is time to change America's mindset from, "Go west, young man" to "go north, young man, for the frontier and opportunity await!"

### The Border gets a Make-Over



Former Congressman Silvestre Reyes, US House of Representative for Texas, 16th District of Texas-FI Paso

### The Ports Act

Former Congressman Silvestre Reyes, US House of Representative for Texas, 16th District of Texas-El Paso (1997-2013) opened the border discussion with a brief update on the Ports Act; before turning the conversation over to Ana Hinojosa, Deputy Asst Commissioner for the office on International Affairs, Homeland Security and Luis Fernando Pérez Azcárraga, Principal Customs Administrator for Strategic Planning and Coordination, Mexico.

It has been read here, the good things the United States, Mexico, and Canada would like to accomplish if they cooperated with each other. One of which fundamentally speaks to the infrastructure that is in a sad state of affairs. \$302B is proposed to be spent on infrastructure in the United States, and \$280 billion in Mexico, including three high-speed railroads; and it would be a shame to not get these things done right.

It does not make sense to spend billions of dollars and have bottlenecks at the border, and so, working with the Customs and Border Patrol and the US General Service Administration, six years ago Congressman Reyes proposed H.R. 1561, the "Putting Our Resources Towards Security (PORTS) Act." Endorsed by the Border Trade Alliance, the US Chamber of Commerce, and the US-Mexico Chamber of Commerce, the PORTS Act would significantly increase funding and staffing levels at the United States' land ports of entry to help combat the illegal transport of drugs, money, and weapons, and reduce excessive bridge wait times. The legislation would have provided \$5B through 2014, to repair and modernize infrastructure at U.S. land ports of entry, and would have provided funding for an additional 5,000 Customs and Border Protection agents to improve inspections and reduce traffic congestion.

While the PORTS Act currently sits in committee in Congress, America's border infrastructure continues to age. 85 percent of US ports of entry were designed and built in Recognizing the 1950's. the environment today, the United States must have a safe and secure border. Just as we invest stewardship dollars must transportation with the GROW AMERICA Act, we absolutely must spend the dollars necessary to modernize our ports of entry. Every dollar we invest in our infrastructure is



a dollar we invest in ourselves, our children, and in our grand-children.

### United States Customs and Border Patrol, Homeland Security

Ana Hinojosa, Deputy Asst Commissioner for the office on International Affairs, Homeland Security

### A Typical Day on the Border

### Processed:

- 992,243 passengers and pedestrians
  - 280,059 incoming international air passengers and crew
  - 48,994 passengers and crew on arriving ship/boat
  - 663,190 incoming land travelers
- 67,337 truck, rail, and sea containers
- 269,753 incoming privately owned vehicles

### Conducted:

- 1,153 apprehensions between U.S. ports of entry
- 22 arrests of wanted criminals at U.S. ports of entry
- 366 refusals of inadmissible persons at U.S. ports of entry

### Seized:

- 11,945 pounds of drugs
- \$291,039 in undeclared or illicit currency
- \$4.7M worth of products with Intellectual Property Rights violations

Identified: 137 individuals with suspected national security concerns

Intercepted: 48 fraudulent documents

Employed: 59,969 men and women, including:

- 21,650 CBP officers
- 2,382 CBP Agriculture specialists
- 20,979 Border Patrol agents
- 766 Air Interdiction agents (pilots)
- 343 Marine Interdiction agents
- 116 Aviation Enforcement officers

Deployed: More than 1,500 canine teams and 250 horse patrols Flew: 169 hours enforcement missions over the United States

### Conducted operations at:

- 328 ports of entry
- 136 Border Patrol stations and five substations within 20 sectors, with 35 permanent checkpoints
- 22 Air and Marine branches, five National Security Operations, and one Air and Marine Operations Center

All of which is done by one of CBP's 60,000 employees, of whom 21,000 are on the border, 20,000 serve as border patrol agents between the borders, and several of whom are in our Air/Marine division.



Infrastructure along the border is one of North America's most pressing issues. Great progress has been made over the last couple of years, as those who live in the Southern California area witnessed at the renovated facility in San Diego. One of the benefits of that renovation is the ability to benchmark new technologies that will increase efficiency of the department one of which is the Trusted Trader Lanes, a new feature that is working well. In San Diego, to facilitate the movement of individuals seeking to cross the border, it has been absolutely critical to increase the number of persons we consider "trusted" because we do not have the amount of time necessary to inspect every individual. San Diego has the largest number of Century users in the Country and that has been a big byproduct of the construction of a facilitated program in order to get persons through the border more quickly.



Ana Hinojosa, Deputy Asst Commissioner for the office on International Affairs

CBP is piloting several initiatives to speed up the process of crossing the border, such as Active Lane Management, which uses technology to change the configuration depending on the traffic for that day, or even time of the day, to expedite traffic. In collaboration with the 21st Century border and management agreement with Mexico the US is working with the Department of Transportation and a number of universities to model wait-time management. DOT has a website that shows all the border crossings' wait-time updates, and CBP has a website that calculates what the wait times are. In addition, we will soon begin to use satellite tracking to provide live wait-time updates so travelers can pull up an app on their phone and see how the



traffic is moving and what sort of time to allow for crossing. Very similar to what business commuters do now to see what roads are clear and which to avoid.

# IMPORTANCE OF THE SINGLE WINDOW

The Executive Order on Streamlining the Export/Import Process for America's Businesses, signed on February 19, 2014, directs the U.S. federal agencies with a role in trade to complete development of an electronic "Single Window" by December 2016. The Automated Commercial Environment

(ACE) will become the Single Window – the primary system through which the trade community will report imports and exports.

# CURRENT FLOW OF INFORMATION

# SINGLE WINDOW VISION



### IMPLEMENTING THE SINGLE WINDOW



The **PGA MESSAGE SET** is a single, harmonized set of the trade-related data required by all federal agencies. Data is collected in ACE, on behalf of PGAs. Environmental Protection Agency (EPA) and Food Safety Inspection Service (FSIS) pilots are targeted to begin Spring of 2014.

**PGA INTEROPERABILITY** is the pipeline through which data is transmitted between ACE and PGAs. Eight agencies are currently recieving data via PGA Interoperability.





**DOCUMENT IMAGE SYSTEM (DIS)** is the mechanism for industry to supply electronic documents needed during the cargo import and export processes. DIS currently supports transmission of forms from CBP and eight partner agencies.

**AUTOMATED EXPORT SYSTEM** re-engineering and incorporation into ACE will result in the creation of a single automated export processing platform for all export manifest, commodity, licensing, export control, and export targeting transactions, reducing costs for CBP, PGAs and the trade community as well as improving facilitation of export shipments through the supply chain. Initial deployment is targeted for April 2014 followed by export manifest integration in January 2015.



### GOALS OF THE SINGLE WINDOW



TRADERS WILL ONLY HAVE TO SUBMIT THEIR DATA ONCE, TO ONE SYSTEM.



INTERACTIONS BETWEEN PGAS WILL BE AUTOMATED TO ENABLE NEAR-REAL TIME DECISION MAKING.



COSTS WILL BE REDUCED FOR BUSINESS AND GOVERNMENT.



AGENCIES WILL OBTAIN DATA MORE QUICKLY AND BE ABLE TO BETTER IDENTIFY UNSAFE, DANGEROUS, OR PROHIBITED SHIPMENTS.





CBP is currently testing facial recognition technology and in the trade environment we will be following Mexico's lead by deploying the "Single Window." The new International Trade Data System (ITDS), which is expected to go into effect by December 2016, "allows businesses to electronically transmit, through a 'single-window,' the data required by the U.S. government to

A great initiative is cooperation with one another so those who trade in all three countries will be able to input their information once and it will then be made available to all points of the trade cycle.

import or export cargo," according to a White House statement. With the single window, an importer/exporter can provide through one transmission — not only data that Customs requires to release a shipment, but additional information that another government agency might need based on the product," explains Travis Hull, director of business services for Torontobased customs broker Livingston International. "Customs can share that data with any government agency through the concept of interoperability. If all the information a government agency requires can be aggregated and shared at the point of origin in one data dump, acceptance at the U.S. border

becomes a formality. It provides greater assurances to shippers, and allows them to more accurately plan moves farther downstream in the supply chain." <sup>7</sup>

One of the great initiatives underway through the North America Leaders Summit and the High Level Economic Dialogue is cooperation with one another so those who trade in all three countries will be able to input their information once and it will then be pushed through to all points that those in the trade cycle are required to do. Harmonization of data is underway so that the information the US asks for is the same information Canada asks, and that Mexico asks for as well.

The US piloted the single-rail manifest with Mexico. That was successful and the US is refining that pilot now so it can be deployed all along the US-Mexico border. With Mexico there is also the Customs-Trade Partnership Against Terrorism. C-TPAT is a supply chain security program. It seeks to safeguard the world's vibrant trade industry from terrorists, maintaining the economic health of the US and its neighbors. The partnership develops and adopts measures that add security but do not have a chilling effect on trade, a difficult balancing act. Identifying those people who are trustworthy involves business application to be a part of this program, CBP sends inspectors out to verify the information included in the application, and, if accepted into the program, members are allowed to jump to the front of the line and face reduced audits, fewer inspections, penalty forgiveness in some instances, etc.

"When they join the anti-terror partnership, companies sign an agreement to work with CBP to protect the supply chain, identify security gaps, and implement specific security measures and best practices. Additionally, partners provide CBP with a security profile outlining the specific security measures the company has in place. Applicants must address a broad range of security topics and present security profiles that list action plans to align security throughout their

www.inboundlogistics.com/cms/article/global-logistics-april-2014



U.S.-Mexico Chamber of Commerce -- PO Box 14414 Washington, D.C. 20044

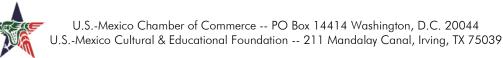
supply chain. CTPAT members are cons idered low-risk and are therefore less likely to be examined. This designation is based on a company's past compliance history, security profile, and the validation of a sample international supply chain."

Authorized Economic Operators: CBP's commitment to supply chain security in its Customs-Trade Partnership against Terrorism program, the US version of the global AEO program underscores that the US will continue to actively pursue mutual recognition arrangements with international partners that have AEO or authorized operator programs grounded in supply chain security. This is a joint effort with Mexico. AEO Mexico certifies manufacturing enterprises, shippers (transporters), and customs brokers. In the near future, the program will extend to other parties in the supply chain to include industrial parks, port operators and courier including, by this summer, authorizing 390 Mexican AEO certified enterprises that have a total of 763 facilities, of which 276 are C-TPAT.

Mexico is currently completing the last phase of negotiations with the United States' C-TPAT program. Once this agreement is formalized, the benefits for certified enterprises that take part in foreign trade with the US will be tangible. This harmonization of efforts with our border partners, and continued cooperation along the US-Mexico border will bring benefit to both nations as we continue to seek improved efficiency, security, and joint goals of effective border management.



 $<sup>^8 \</sup> www.cbp.gov/border-security/ports-entry/cargo-security/c-tpat-customs-trade-partnership-against-terrorism$ 



### Mexico Customs Administration

Luis Fernando Pérez Azcárraga spoke in the place of Alejandro Chacon Rodriguez, Chief of Mexico Customs Administration who had a last minute conflict that prevented him from travelling to the Dallas area. Luis provided a statistical update on US-Mexico border sharing that from January to June 2014, the total worth of import and export goods was \$386B, 3.7% more than that of the same period in 2013. During the same time, taxes collected from foreign trade operations totaled \$13.2B, a growth of 5.5% regarding with the same period of last year. Such amount represents 18.7% of total revenue collection. Furthermore, Customs collected 45.9% of the total value-added tax paid in the country between January and June 2014.

The following operations are registered daily in Ports of Entry across the country:

- 44,500 operations and more than 28,000 cargo vehicles participating in foreign trade
- More than 184,000 privately-owned vehicles and 944,000 people cross the border
- 49,000 international passengers arrive through the airports



Luis Fernando Pérez Azcárraga

Mexican Customs Administration is modernizing its infrastructure in order to properly meet the dynamics of foreign trade. The modernization plan for this administration includes 56 projects. The plan will improve and optimize current infrastructure in order to facilitate foreign trade and promote competitiveness. Innovative aspects of the projects include:

- Automated clearance (pilot program in Nuevo Laredo III)
- Benefits in customs clearance for certified enterprises
- Exclusive lanes for certified enterprises (AEO Mexico, CTPAT-FAST)
- New scanning technology for license plate identification
- Relocation and updating of non-intrusive inspection equipment
- Optimization of non-intrusive inspection procedures to expedite clearance
- Integrated systems to automate operations and improve risk assessment
- Sharing of images from non-intrusive equipment in the US-Mexico border (pilot program in Matamoros-Brownsville rail crossing)
- Deployment of identification mechanisms for pedestrian crossings
- Development of "mirror customs" (pilot program in Otay II-Otay-Mesa East)



### Modernization Plan of Customs Infrastructure 2013-2018



New pedestrian access "Puerta Este"

Progress: Starting in the near future (September, 2014).

5.1 MD Investment: Government (State funding)

### Reynosa



Relocation of lanes

Progress: Starting in the near future (September, 2014)

Investment: 381 thousand Dlls.

### Matamoros



New rail crossing Matamoros-Brownsville

Progress: Starting in the near future (September, 2014) Investment: MD 84

(SCT/Licensee funding)

### Ciudad Juárez



New bridge crossing and port facilities "Guadalupe Tornillo"

New infrastructure POV and cargo inspection.

Progress: Starting in the near future (September, 2014). Investment: 14.30 MD



### Full reorganizing of bridge

"Zaragoza-Ysleta" 50% increased capacity in inspection platforms, 66% in import exit lanes and 25% in equipment.

Progress: Starting in the near future (September, 2014).

Investment: 26.58 MD

### Prospective 2014

### Ojinaga



**Expanding overall** facilities (Phase I)

Progress: Starting in the near future (September 2014).

Investment: 11.46 MD

### Outlines Project expanding and reorganizing

Acuña, Palomas, Ojinaga, Mexicali II y Subteniente López Progress: Under (December, 2014).

Investment: 2.7 MD

6 different ports of entry.

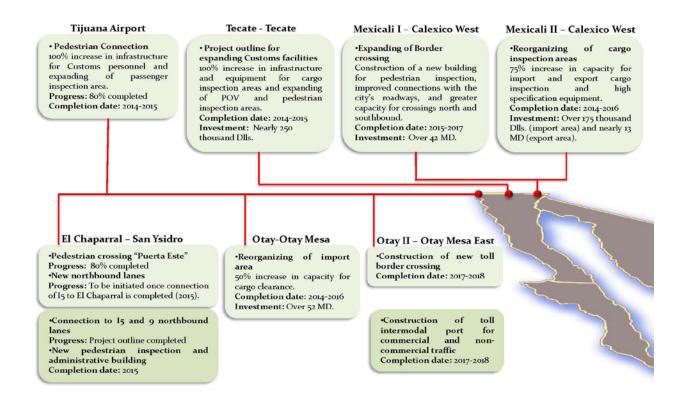


### Nuevo Laredo



New certified enterprises lanes and buffer zone Progress: Starting in the near future (August, 2014). Investment: 1.15 MD (State Government funding)



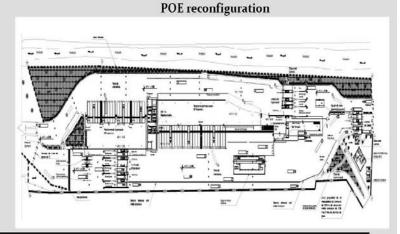


Working with the United States, Mexico is successfully incorporating Single Rail Manifest unifying data contained in the cargo manifests which will allow carriers to submit information to Customs authorities in Mexico and the United States (SAT and CBP) simultaneously in electronic format. This enables customs authorities of both countries to perform joint risk assessment. Additionally, traders will benefit from having an identical format to convey information, resulting in faster and less expensive procedures. Likewise, a pilot program is being deployed for northbound traffic at Nogales, Sonora – Nogales, Arizona, and at Mexicali, Baja California – Calexico, California.

The Mexican Revenue Service (SAT) is developing a manifest for land cargo focusing a new effort on sea and air cargo by pilot testing of harmonized manifests. Many efforts already in sync include cargo pre-inspection. Both CBP and SAT conduct a joint inspection at a single checkpoint, facilitating customs clearance at three ports, improving passenger inspection by implementing a new procedure in 12 airports, by which baggage inspection is done using X-ray equipment reducing wait-time for passenger customs clearance. A Trusted Traveler Program ("Viajero Confiable") is now located at the Mexico City, Cancun and Los Cabos airports, as well, and, at last count, 468 members were enrolled in the program.

### Next steps

- 1. Project timeline approval
- 2. Stakeholders outreach
  - · Certified companies
  - · State and local authorities
- 3. Define operation rules and communication plan
- 4. Improve existing infrastructure
- 5. Define milestones
  - · Benchmarking (before/after)
  - Monitoring
  - · Stakeholder feedback



Stage	Activities	Execution period
Reaching Customs Facilities	Lane confinement: - Stakeholders commitments - Improving infrastructure	January-March 2014 May- September 2014
Entering Customs facilities and inspection and verification at Mexican Ports of entry	<ul> <li>Operation rules and communication plan</li> <li>Temporary infrastructure improvements</li> <li>POE reconfiguration</li> </ul>	April-June 2014 July-October 2014 May 2014-July 2015
	Monitoring before and after improveme	nts

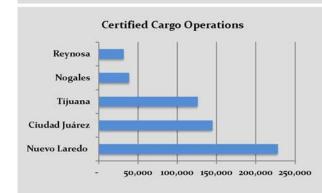
### Main objectives

Develop infrastructure, equipment and operation rules to expedite clearance for AEO Mexico and US.

Benefits are divided in four stages:

- 1. Reaching Customs facilities.
- 2. Entering Customs facilities.
- 3. Inspection and verification at Mexican ports of entry.
- 4. Inspection and verification at CBP.





### Pilot Program selection process

- Review built in capacity and traffic flows in customs facilities along US/MX border.
- 1. Joint visits in the following crossings:
  - Zaragoza/Ysleta
  - Mexicali/Calexico
  - · Tijuana/Otay
  - · Nuevo Laredo/Laredo
- 3. Recommendation for pilot execution based on:
  - · Required infrastructure
  - Potential impact
  - Stakeholder support



## Technology's Influence

Tying tri-national transportation efforts to the energy sector and from growth potential of the Panama Canal and Arctic zone to border facilitation is technology, technology that improves security, provides access to managed information, and moves national initiatives efficiently and effectively to completion. Opening the dialogue on technologies application is Dr. John Chrisos, Vice President, AS&E, discussing the importance of private sector's continued investment and development in new technology.

### Advanced Technology on Border Security

Advanced technology has great impact in the effort to secure borders against drugs, currency, and illegal immigration. Border agencies need the support of manufacturers' advanced technology that is designed

and built for non-intrusive inspection and x-ray systems. Proven technology that has been used to protect American military bases and international airports such as the one in Mexico City Airport, that is



Dr. John Chrisos, Vice President, AS&E,

the first of its kind in the world to leverage x-ray technology to improve air cargo inspection. Using non-intrusive equipment to locate drugs, contraband and people, agents can quickly identify potential bombs or other devices of concern.

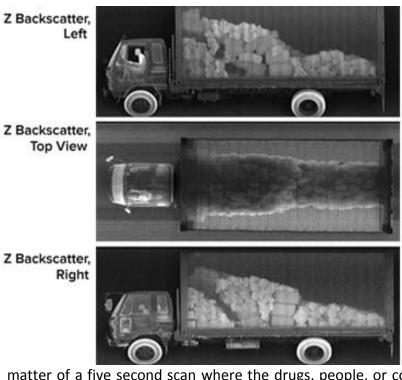








Using advanced technologies, such as transmission x-ray similar to what is found in the doctor's office, border security is vastly improved. Currently in place is the patented technology called a Z Backscatter that bounces x-rays off organic materials such as explosives, drugs, cigarettes, and people and converts that backscatter d then we turn it into an image for agents to use during inspections.



In a typical day on the border, an officer has about 30 seconds to make a primary inspection and make a quick decision whether or not to pull that into secondary а inspection. Say if during the secondary inspection there was a dog "hit" on a vehicle. The officer involved would still not necessarily know where in the vehicle the dog "hit on," and would therefore have to rip the vehicle apart; taking three or four officers three or four hours to rip the vehicle apart to find where the contraband was hidden. As we introduce x-ray systems we can locate in the

matter of a five second scan where the drugs, people, or contraband are hidden. And so now the officer simply takes the image and instantly knows where to go to the vehicle.

What this relates to is cost to CBP, it relates to manpower, it relates to efficiency and the efficiency of getting vehicles through the border quickly. CPB, over the last four years, has installed twenty-seven drive-through ports on the Southwest border. These ports can take a truck, a bus, or a car, and typically a five second scan, and instantly agents have multiple views of what is in that vehicle. The number of seizures from CPB, based on these twenty-seven systems, dominates a considerable amount of their seizure rate.

Border agents use a comprehensive line of technology based products to address the needs and situations of the day. From mobile applications, to drive through portals, to high powered systems, including a new system that is a revolutionary. It is a handheld x-ray system weighing about eight pounds. It is called the mini Z and was launched in Washington DC this June. What the Mini Z allows agents to do, is to x-ray in a portable fashion. So an officer in the field could easily and personally inspect a vehicle's tire or seat, or if someone was crossing the border with just a backpack, scan the backpack and clearly see what was inside.



The key, of course, is proper integration of these products. If we look at a typical port of entry, there are multiple layers of information system used from a cargo inspection, to a passenger vehicle inspection, and what is missing is how to integrate all of these products.



Developing networking systems that tie individual systems back to a central command unit will improve success rates of seizures and dramatically reduce decision times. Answering questions such as how to get data back into a central location and optimize the efficiency of the whole process is a question almost all agencies are facing today and for which innovators and IT industry leaders such as Tony Jimenez and MicroTech may be able to provide additional insight on.

### Big Data

Before addressing the issue of technology integration and IT networks, Tony Jimenez, President, MicroTech shared that the primary concern is the importance of education. Education is important for all persons, but, if you are Hispanic, it is even more important because opportunities that might be available to somebody else have not historically always been available to young Hispanic males. STEM programs are driving home the fact that we need to do more to prepare our children in science, technology, engineering, and math.



Tony Jimenez, President, MicroTech

A key component of that type of education is you can take information like we have received today and tie it together. So CPB is talking to ICE, who is talking to Homeland, who is talking to the DOT, who is talking to the Mexican government and all the departments within the Mexican



government, and all the agencies around the world that have people flying in and touching down in Mexico City, or LA, or the Canadian border; and everyone wants to know – how can it all be tied together? Technology!

A few years ago, the Department of Transportation began a pilot program called Gateway IT bringing together eleven databases so that when somebody came in from another country, everybody – be it officers in the US, Canada, or Mexico could be seeing the same information. Twenty years ago we would have scoffed at the idea that we could merge systems and retain complete security of the information. Yet, today it is commonplace. Take for example the NTTA toll tag which allows users to go through a portal without stopping, have their account dinged the proper fee, and when their account is dinged, if insufficient funds are available, an automatic withdrawal occurs from their bank account – all while users remain oblivious to it all and merely keep driving down the road. That is technology integration.

It began with the Army's first shared data warehouse years ago that merged forty systems from various universities resulting in one shared data platform. Doing so allowed each system to lower costs and reduce personal, as, now, they do not need forty different coders, forty different program operators, or forty different systems; they need only a single system accessible to all agencies, and all the individual universities needed was someone who knew how to turn on a computer and extract relevant information.

Technology today offers federal agencies, and others, a complete platform and infrastructure that meet regulatory obligations while delivering all the benefits of cloud, such as increased performance, uptime, and enhanced security. This is the type of technology will meet the demand for information at our borders, assist agencies with allocating resources to the right location at the right moment, and ensure the long-term sustainability of North America.

### Connect Mexico

Luc Ringuette introduced Connect Mexico, a joint effort of the United States-Mexico Chamber of Commerce and ProMexico, to promote investment, trade, commerce, economic development and stronger bi-lateral relations.

It is the intention of the US-Mexico Chamber of Commerce, (USMCOC) to establish an E-Commerce marketplace platform to significantly advance the revenue potential for small to medium size Mexican companies through a joint effort with ProMexico.



Luc Ringuette, Chief Executive Officer United States Mexico Market Exchange



The USMCOC is a not-for-profit corporation, established in 1973 by a group of Mexican and U.S. business executives under Secion 501(c)(6) of the Internal Revenue Code of the United States, as a non-profit business association chartered in Washington DC, and a bi-national organization to promote trade, investment, and joint ventures on both sides of the border, operating through Regional Chapters with offices in Mexico and the United States.

ProMexico is a Public Trust considered a decentralized public entity, under the coordination of the Secretariat of Economy, constituted in accordance with Mexican laws, and is the Mexican Federal Government Entity with domicile in Mexico City, in charge of providing support in conducting, coordinating, and executing actions related to international trade promotion, and attraction of direct foreign investment undertaken by other agencies and entities of the Federal Public Administration.

Both the USMCOC and ProMexico have the common mission of promoting trade, business relationships, economic strategic alliances between business in the United States and Mexico, and the common to benefit medium and small companies assisting them to compete and navigate international commerce. Both parties promote development of healthy sustainable markets, as well as enhance opportunities for those companies to succeed and have networks, and: both entities have offices in the United States and Mexico with strong international contacts which will contribute to this collaborative effort and the success of the "Connect Mexico" project.

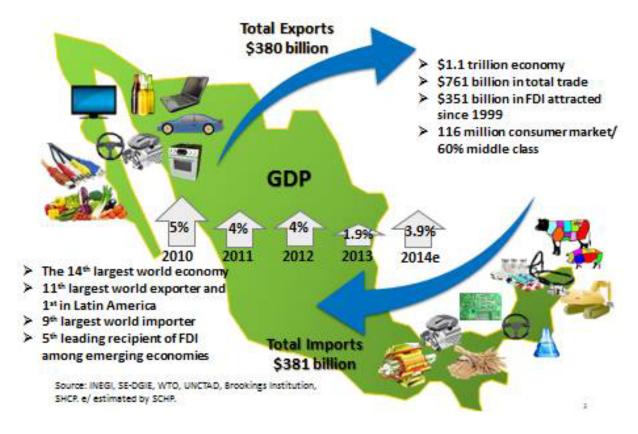


A priority of Connect Mexico is to increase the competitiveness of medium and small companies and create sustainable markets for critical industry sectors. There have been previous collaborative efforts between the USMCOC and ProMexico in recent years to promote Mexican foreign trade and strengthen national markets and investment, including opening new opportunities for Mexican products and services in association with the private sector in North America. The Ministry of Economy has supported and endorsed these efforts.

Consolidating the power of critical industry sectors, connecting them under one system in order to act as one force, reducing direct and indirect costs, including access to discounted supply chain services and information technologies will increase the value and profits of participating companies.

The project will initially launch as a Business to Business (B2B) marketplace with a target of 600,000 Mexican 5MB enterprises (about 15% of Mexico's small and midsize businesses, "SMBs") ready to sell and trade their products and services globally, with primary NAFTA focus on the United States and Canada. UME.XX will additionally create a Business to Consumer (B2C) marketplace after the launch of UMEXX B2B marketplace.

The project to be launched is expected to be a major improvement over Alibaba, considering the capabilities and history of the USMCOC and the project participants, who boast long-term relationships and understanding how to best serve 5MBs of Mexico.



### E-Commerce Market



E-Commerce is the buying and selling of products and services over the Internet.

Global B2C sales in 2012 topped \$1T (\$1.12T). In 2016, B2C sales are projected to increase to \$2T, representing a massive 117% jump since 2011 (16% avg/year). In comparison, historically powerful industries such as oil & gas and pharmaceutical are only growing by 7.5% and 4.0%, respectively.

Dramatic results already exist. Alibaba is an online retailer that was founded barely 14 years ago, and some analysts estimate its current IPO valuation at \$100 billion. On November 11, 2012, Taobao reported \$3B in sales in a single day.

In 2012, B2C sales as a percentage of total retail US sales reached 10%, with projections to reach 17% by 2020. US B2B sales are estimated to reach \$559 billion by 2013. By comparison, US B2C sales will be \$252 billion - making US B2B fully twice the size of B2C.

E-Commerce growth will receive an additional boost from generation V's (births between 1980 and 2000) demands for increased mobile transactions, as evidenced by projections that mobile commerce will account for 24.4% of ecommerce by 2017. In 2012, fifty million new websites were launched and are naturally also part of the fuel to this unrelenting ecommerce demand.



### **Operations**

Along with the day-to-day managing of the project, UMEXX additionally will provide services to the SMBs, Traders, and Consumers. The primary focus will be to create substantial new revenues for the Mexican **SMBs** on the **UMEXX** marketplace platform.

It is also expected that UMEXX will leverage best practices for all revenue generating activities and transactions, including service desk and rapid response support. The UMEXX sales team will be distributed across a wide variety of people throughout the US and Mexico and will use technology for seamless organization of customer interactions and internal collaboration.

UMEXX will implement service desk technology to allow members to collaborate together on problems efficiently and seamlessly regardless of their location, including infrastructure (hosting, websites, networking, etc.), website functionality, and SMB, Traders, and Consumer support for any questions.



### Direct Activities

USMCOC and ProMexico resources can be utilized to organize meetings, do promotional and informative activities related to Connect Mexico. ProMexico will provide the list of medium and small enterprises in Mexico that it has registered in its system. This group of companies will form the initial business community to be targeted for participation and assistance provided they have previously expressed their consent in writing. ProMexico will facilitate identification of medium and small businesses that have potential to grow and could be significant beneficiaries of Connect Mexico. Advancing the project by providing support to conduct strategic meetings throughout Mexico and the United States to inform and educate companies about Connect Mexico.

The UMEXX sales team will be distributed across a wide variety of people throughout the US and Mexico and will use technology for seamless organization of customer interactions and internal collaboration.

### Registered Enterprises

The Connect Mexico project will be open to participation by medium and large businesses on criteria established by the Leadership Team on terms and conditions consistent with the laws of the United States, Mexico and such political subdivision as may be required. As a requirement for participation, the Registered Enterprises will be required to agree, in writing, to be bound by policies established by the leadership team, including, but not limited to, compliance with antitrust and global anti-corruption laws in effect within the Territories. The Leadership Team shall be comprised of the Executive Director of International Promotion, ProMexico and the Director for International Trade Development and Assistance Centers, USMCOC.

### 2013 Required E-Commerce B2B Launch Success

- Success for Country B2B Marketplaces requires a large 5MB network providing diversified products from multiple industries.
- US and Canada Hispanic Loyalties to Mexico Home and Government are important for UMEXX Launch.
- 2013-2016, negotiation power for 5MB margins and profits depended on site size and marketing from both private and government.
- Support to also launch or expand B2C Ecommerce for 5MBs is additionally critical.
- 600,000 5MBs loaded in database will create pre-launch leverage to attract a large volume of qualified traders, consumers, and members for the 5MBs.

### Summary

Sustainable development is about the balancing of forces such as the environment, the economy and societies needs. As a joint effort of governments, businesses, environmentalists, and others seeking economic growth, sustainability leverages innovative and diverse ways of thinking to create value and produce positive outcomes for all parties.

In a global environment where economies are heavily influenced by geopolitics ranging from military and diplomatic geopolitics to economic or energy geopolitics, the question of sustainability is one that North America can simply not get wrong. As energy driven initiatives reawaken, and investments once again pour into our borders and transportation infrastructure; as commerce capitalizes on the investments made in Panama and the Arctic, and we learn to commercialize Research and Development, we can be proud that North America has already begun to implement innovative and advanced technologies that reduce risk, lower costs, improve performance, and generate revenues; all of which drive sustainable environments.

Now that we have the knowledge, it is time to start putting sustainable measures into full fledge practice. Universal access to sustainable energy is essential to support North America. Consider that analysis of global energy resources show that over the last twenty-five years energy consumption has doubled as developing countries came onboard and online. The growth in these relatively new markets will create a surge in energy consumption that will see within fifteen years, the consumption of energy resources double again.

North America must address the coming energy crisis and build upon its strong and successful relationships to create new technologies, implement new efforts, and get serious about energy independence. The Center for North American Sustainable Economic Development focuses its energy along this spectrum of concern. Taking into consideration the formidable role energy plays in a host of other sectors, The Center recognizes that without advanced technological tools, we cannot maximize efficiencies, let alone take advantage of business analytics that drive decision-making processes and produces advantages of scale.

The focus on energy and technology will require an educational component to maximize results. North America needs knowledge brokers, men and women equipped for the work ahead, and trained to deliver results. These future leaders will be skilled and keenly aware of the dynamics of bi-national and tri-national relationships, masters in their industry, and champions of reform.

Gone are the days of the lone maverick. Today's leaders are keenly aware that independence is a myth; there is only interdependence as we work toward sustainable solutions. In this trinational relationship, any one of us, regardless of industry or sector, private or public positions, can find a role within that dynamic to envision a new day for North America.

It is time for a renewed North American idea.



Together we will collaborate, create, structure and sustain:

- North American Energy Independence
- Transportation and Logistics
- Infrastructure and Border Facilitation
- Manufacturing and Supply Chain Integration
- · Technological Application and Networks

We will do so with an eye on the impact we are having on our environment. We will do it by equipping and training future leaders. We will build sustainable actions into our business plans and models and in our decisions recognize that the prosperity of our lands and people require us to bridge the strength of our nations and our cultures to forge new realities.

The US sits on the cusp of an energy renaissance. Canada, rich in oil and gas, is optimistic of the opportunity to set the benchmark on balancing environmental stewardship with oil and gas enterprises, and working with the States to move oil cleanly and efficiently. Mexico is applauded for the strength of character and resolve to push forward reforms that will capture the promise of a robust economy and prosperous commerce. The world enthusiastically supports Mexico and North American nations stand ready to support these efforts.

North America awakens to a new day. The framework, the business model, the strong network of relationships built over decades and generations exist for this moment. It is a moment for strength, for innovation, and for a renewed North American idea.

By this tri-national partnership, prosperity and peace will be emboldened, opportunity abound, knowledge and the education of our future leaders enriched. As commerce and democracy work in tandem to deliver solutions for a strong, sustainable economic development, those present today must recommit to designing new means of collaboration that bring public and private enterprise together. Nations must build bridges one unto another, embrace cultural ties and work jointly to address tri-national concerns, from infrastructure to North American security and energy independence.

During this journey, over the next twenty years, the US-Mexico Chamber of Commerce will be present as a conduit between countries, a facilitator of strong tri-national relations that promote trade, investment, and joint ventures that bridge business, legal, regulatory, and economic systems. Offering summits and conferences throughout the year including the Annual Gala in Washington DC, the BiNational Summit, and the Annual North American Sustainable Economic Development Summit. The Center for North American Sustainable Economic Development will ensure members of the US-Mexico Chamber of Commerce are informed, knowledgeable of opportunities, and equipped to make immediate decisions that affect the future of their individual corporations and agencies, and of North America.

# Highlights from Dinner

Kenneth Smith-Ramos, Director of Trade and NAFTA Office at the Embassy of Mexico to the United States, spoke on behalf of Mexico's Secretary of the Economy, Ildefonso Guajardo. Mr. Smith-Ramos' comments centered on the increasing scope and magnitude of Mexico's economy and global trade within North America.













### The Center for North American Sustainable Economic Development

The Center for North American Sustainable Economic Development (CNASED) is a project of the United States-Mexico Cultural & Educational Foundation (USMCEF). The USMCEF is a 501(c)(3) non-profit organization whose mission it is to provide activities that promote an enhanced knowledge and understanding of the educational and cultural difference between the United States and Mexico in order to establish closer and stronger ties. USMCEF was founded in 1996, to educate individuals and businesses, increase and enhance communication, cooperation, knowledge and understanding between the United States and Mexico; and serving as an active partner in the development of both nations. USMCEF develops and implements enriched understanding through educational internship exchange programs, forums and seminars, training programs, cultural activities and exhibits, as well as, awards and scholarships.

The USMCEF is a sister organization of the US-Mexico Chamber of Commerce, a 501(c)(6) non-profit business association chartered in Washington, D.C. in 1973. The USMCOC is a bilateral organization that was created to promote trade, investment and joint ventures on both sides of the border. Now in its fifth decade, the Chamber has grown into a unique non-profit corporation operating through ten offices in Mexico and ten offices in the United States. All USMCOC Chapters and offices, with strong local membership and international contacts, help businesses bridge differences in legal, regulatory and economic systems, as well as language and culture.

For more information regarding the Foundation please visit USMCEF.org or contact Gabriela Kenny with the US-Mexico Chamber of Commerce at (469) 893-1743.

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