Motor & Equipment Manufacturers Association

Comments to the United States Trade Representative on
Request for Comment on Negotiating Objectives Regarding Modernization of
the North American Free Trade Agreement with Canada and Mexico

Docket No. USTR-2017-0006

June 12, 2017

Introduction

The Motor & Equipment Manufacturers Association (MEMA) represents 1,000 vehicle suppliers that manufacture and remanufacture components and systems for use in passenger cars and heavy trucks providing original equipment (OE) to new vehicles as well as aftermarket parts to service, maintain and repair over 260 million vehicles on the road today.¹ Our members lead the way in developing advanced, transformative technologies that enable safer, smarter and more efficient vehicles, all within a rapidly growing global marketplace with increased regulatory and customer demands.

Vehicle suppliers are the largest manufacturing sector in the United States directly employing over 871,000 Americans in all 50 states plus the District of Columbia. Together with indirect and employment-induced jobs, the total employment impact of the motor vehicle parts manufacturing industry is 4.26 million jobs. Nearly $435 billion in economic contribution to the U.S. GDP is generated by the motor vehicle parts manufacturers and its supported activity. In total, motor vehicle parts suppliers contribute more than 77 percent of the value in today’s vehicles.²

MEMA is pleased to provide its feedback on U.S. Trade Representative’s (USTR) Request for Comment on Negotiating Objectives Regarding Modernization of the North American Free Trade Agreement with Canada and Mexico. MEMA also respectfully requests to make a statement for the record at the USTR’s public hearing being held on June 27, 2017.

The North American Free Trade Agreement, or NAFTA, has played a critical role in the development of North American supply chains and been a successful model for the motor

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¹ MEMA represents its members through four divisions: Automotive Aftermarket Suppliers Association (AASA); Heavy Duty Manufacturers Association (HDMA); Motor & Equipment Remanufacturers Association (MERA); and, Original Equipment Suppliers Association (OESA).

vehicle industry in the United States. The agreement has allowed for continued growth in motor vehicle production as well as U.S. employment in the parts and components sector.

MEMA recognizes that the parts and components supplier industry is central to the renegotiation of NAFTA and MEMA supports the administration’s efforts to modernize and update the agreement. However, considerable care must be taken not to jeopardize a thriving vehicle supply chain and weaken U.S. employment. MEMA stands ready to work with all parties to that objective.

**Figure 1**

![Current trade flows in motor vehicle industry](chart)

Motor vehicles suppliers are dependent on a world-wide network of suppliers and customers for continued viability and growth. Current trade flows demonstrate the industry’s heavy reliance on a global supply chain. (See Figure 1) Motor vehicle suppliers have extensive operations and multiple plants in each of the three NAFTA countries –this is a vast supply chain network throughout the region. From an operational perspective, NAFTA is borderless and trade of motor vehicle parts within the NAFTA\(^3\) is closely balanced.\(^4\) (See Figures 2 and 3). At the same time, supplier employment and productivity in the U.S. has grown. In short, NAFTA has been good for the U.S. supplier industry, good for the American worker, and good for our country’s economy.

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\(^3\) While some commentators point to a motor vehicle parts trade deficit with Mexico, this analysis fails to reconcile the multiple times a motor vehicle part crosses the U.S./Mexico border prior to final assembly.

\(^4\) This differs greatly from other countries that have consistently maintained tariff and non-tariff barriers to trade.
As the administration considers the priorities of a renegotiated NAFTA, MEMA has focused on three issues:

- NAFTA promotes continued job growth in the supplier industry;
- Changes to NAFTA need to be carefully calibrated; and
- MEMA is proposing specific updates for the agreement.

**Figure 2**

*Case study: Motor vehicle industry has leveraged NAFTA to create an integrated supply chain across North America*

1. Firstronic, based in Grand Rapids, Mi., draws the capacitor itself from a Centennial, CO, supplier called Arrow Electronics Inc., which imports the components from multiple suppliers in Asia.

2. The capacitor is shipped to Ciudad Juarez, Mexico, and inserted into a circuit board.

3. Circuit board shipped to El Paso to avoid taxes due to temporary importation into Mexico.

4. The component returns to a Kongsberg Automotive factory in Malmo, Norway, a Norwegian company, assembles the circuit board into a seat actuator.

5. Once the circuit board has been installed in the actuator, the control unit ships to, among other sites, a Lear Corp. seat-manufacturing plant in Adelanto, Texas, and a Magna Inc. seat plant in Mississauga, Ontario.

6. Traveling inside the finished seat, the capacitor is shipped a short distance to an auto assembly plant. It is installed in the Ford Flex SUV at its factory in the Toronto suburb of Oakville and GM’s Escalades, Suburbans, Tahoes and Yukons in Adelanto, Texas.

**Figure 3**

*Summary of Trade Barriers for Automotive Parts*

- **Mexico:**
  - Ave: 0.6%
  - Max: 0.5%
- **Canada:**
  - Ave: 2.8%
  - Max: 3.3%
- **United States:**
  - Ave: 2.1%
  - Max: 10.8%

**Additional:**
- Other non-tariff barriers include those that trap equity investments/profits (e.g., China) and currency controls/high withholding taxes (e.g., Argentina).
- Auto part tariffs shown. Tariff on full vehicles even higher (Ford Car: 10 – 86%)
NAFTA Promotes Continued Job Growth in The Supplier Industry

The motor vehicle industry is in the center of major advancements and changes that promote safer, more fuel-efficient vehicles. Suppliers dedicate significant resources to the innovation, research, development, and production of over 77 percent of the technology in today’s vehicles. Examples of these technologies are advanced driver assistance systems (ADAS), collision avoidance and mitigation systems, vehicle-to-vehicle and vehicle-to-everything communications (V2V, V2X), automated driving features, and a host of emissions-reducing and vehicle efficiency components and materials, all of which improve the driving experience. The U.S. is the innovation hub for North America and the global automotive industry. As such the innovation, development, and engineering, for the vast majority of automotive imports from Mexico is completed in the U.S. It is critical that the U.S. remain in the forefront of this innovation development and product implementation.

This is not merely a matter of life-saving and vehicle efficiency technology development, but also the work associated with these new technologies will drive job development in the U.S. which, in turn, will promote exports and ensure that the U.S. will maintain its technology and innovation leadership position in the world. NAFTA has been a factor resulting in the supplier industry’s 19 percent job growth in the last four years with a year-over-year growth rate of seven percent.\(^5\) This job growth has allowed for near pre-recession employment in 2016. (See Figure 4)

In part, this domestic investment is possible because of the industry’s access to imported parts from low-cost countries. In a study by The Boston Consulting Group (BCG), the authors compared the reliance of the U.S. and Germany to imported parts from low-cost countries. (See Figure 5) The two countries are equally reliant on parts from low-cost countries (cost per vehicle of imported parts is $3,480 in the U.S. and $3,450 in Germany). This sourcing allows the labor market in the U.S. to focus on developing and manufacturing new and advanced technologies and systems domestically and, therefore, providing high-quality, higher-paying jobs in the U.S.

Figure 5

The motor vehicle industry is a global industry. Its global growth is due to international customer demands and the business model of manufacturing in the places where customers are located. NAFTA allowed “nearshoring” of an interconnected supply chain between the U.S., Canada, and Mexico that has provided an opportunity for U.S. manufacturers to compete with the rest of the world. Mexican automotive production overall relies on a large range of higher value-added and precision items, from precision metal and plastic parts to electrical components. While suppliers source globally, U.S. origin components typically represent the majority of component content of automotive parts and vehicles made in Mexico.

Policies that will make U.S. manufacturers more competitive by creating more jobs and cultivating capital investments will allow the U.S. to achieve greater economic stability. Our member companies currently anticipate continued job growth in our industry for workers
such as engineers, technicians, and skilled trades and, therefore, expect to contribute heavily to the economic security and stability of our country. However, this growth assumes no large-scale market disruptions or drastic changes to policies.

MEMA shares President Trump’s commitment to grow jobs in America. A significant number of supplier jobs are dependent on the locations of final assembly production of motor vehicle manufacturers since most OE suppliers are required to be within a relatively short distance (250 miles maximum) of vehicle manufacturers. (See Appendix I) This arrangement allows for “just-in-time” manufacturing – greater productivity, improved logistics, and cooperative work during final assembly.

More specifically, there are three challenges that must be recognized:

1. **Capacity** – In the U.S., vehicle manufacturers operate at a 110 percent capacity utilization and suppliers operate at the highest level since 2000, thereby limiting unused or under-used manufacturing; (See Figures 6 and 7)
2. **Sales Volume** – U.S. sales volumes are at a peak, limiting the economic viability of opening new plants in this country; (See Figure 8) and,
3. **Skilled Workforce** – Availability of skilled labor to support new U.S. facilities must be developed. (See Figure 9)

Both vehicle manufactures and the supplier industry are operating at peak capacity at their manufacturing facilities throughout the country. Therefore, any new capacity would require new or expanded facilities. But with the U.S. sales volumes at their peak and the unlikely scenario that this will change, the economic viability of opening new facilities is minimized.

When BCG studied the economics of reshoring, the authors found that it would take 16 (resource) to 38 (relocate) months from decision to production. Furthermore, it could take up to nine years for a supplier to achieve payback for these decisions. Without a viable economic outlook, the opportunities are limited.

Even though the U.S. is at near full employment and manufacturing job openings are at pre-recession levels, concurrently, like many manufacturing industries, suppliers suffer from a lack of skilled tradespeople. The industry is leading private endeavors and working with the public sector to fill these jobs. Additionally, MEMA sent a memorandum to Transportation Secretary Elaine Chao, at her request, about how suppliers utilize apprenticeship and other programs to recruit, acquire and retain skilled workers. (See Appendix II)

More must be done to maintain our country’s competitiveness in skilled trades. A recent report from the National Academies of Sciences, Engineering, and Medicine, examined “the coverage, effectiveness, flexibility, and coordination of the policies and various programs that prepare Americans for skilled technical jobs.” The report makes several recommendations on possible ways to tackle this pervasive and complex challenge facing American companies in a wide variety of industry sectors.

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6 “Building America’s Skilled Technical Workforce” National Academies of Sciences, Engineering, and Medicine, 2017 [https://www.nap.edu/download/23472](https://www.nap.edu/download/23472)
Figure 6

Current OEM capacity utilization in US >110\%, ability to resshore production limited for OEMs without investment

2016 NA Capacity Utilization by Plant
(each circle represents a plant)

Capacity Utilization:
MX: ~114%
US: ~113%
CA: ~102%

Represents production capacity at 2 shifts, 52 weeks/year, 5 days/week

Plant Location

US | MX | CA

Plant Production Oct 16-Feb 17

50,000

Notes:
1. Capacity is straight time capability over 52 workweeks, assuming two shifts of 8 hours per day per week.

Source: Ward’s Automotive, BCG analysis

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Figure 7

Supplier capacity utilization highest since 2000; minimal ability to increase volume without investment in new capacity

US supplier capacity utilization

Global recession

+30%
Figure 8

US sales volume at its peak

Figure 9

Availability of skilled labor to support reshoring also a key concern for US manufacturers

MEMA members worry about ability to source talent in the US

"Skilled trade is a huge issue for my industry. There’s just not enough people coming down the pipeline... And we’re losing a lot of the talent we do have to retirement." - COO, Tier 2 supplier

"Even if it made financial sense to move product back here, I would have a hard time finding the skilled labor with the interest in the work... Turnover would hurt us" - President, Tier 1 supplier

"We have difficulty finding skilled people in the US for current products, let alone for new production." - Chairman, Tier 1 supplier


BCC Tax and Trade Study 06-11-2017 draft
The future talent demands are daunting. It is estimated that by 2025, with the Baby Boomer generation shifting into retirement, 2 million manufacturing jobs will go unfilled across the country. Despite the industry’s continuous efforts to promote motor vehicle manufacturing careers, the industry still struggles to fill these job openings. Even as the industry adds jobs to the U.S. economy, there are not enough workers to fill these positions.

MEMA urges the administration to focus on future job growth in the motor vehicle industry with the emphasis on automated technologies, safety systems, and fuel efficiency. Our country’s system of protection for intellectual property, coupled with access to world-class research institutions, provides the U.S. with the strongest opportunity to lead in the development and implementation of 21st century mobility. In short, the objective should be to maintain and increase the existing higher value-added manufacturing in the U.S. where we already have a competitive advantage.

While MEMA understands the need to carefully balance regulatory requirements with costs imposed on the industry and the consumer, well-crafted regulations are often key to the effective introduction and growth of new technologies. Therefore, we encourage the administration to continue to take a leadership position on the global development of these technologies and the standards associated with their implementation. The U.S. should work with other countries, including Mexico, to align and harmonize regulatory schemes, particularly for new and developing technologies. Such leadership will pave the way for more jobs and increase innovation in the U.S.

**Changes to NAFTA Need to be Carefully Calibrated**

Free and fair trade is imperative for a strong domestic supplier industry. The administration should update NAFTA in a manner that does not disrupt supply chains or increase production costs. This includes any potential changes to the rules of origin (ROO).

BCG found that the implementation of a tariff on goods from Mexico would create $16-$27 billion of additional costs for the U.S. automotive market, with the impact varying by vehicle manufacturer. (See Figure 10 and 11) Consequently, as the cost of vehicles rise, vehicle manufacturers may decrease content that could impact 25,000 to 50,000 U.S. jobs. (See Figure 12) MEMA recognizes that tariffs do not equate to changes within the rules of origin, but the analysis is important since it clearly demonstrates the direct link between increased costs and decreased employment.

As the administration is aware, the ROO within NAFTA are the most stringent of any free trade agreement. MEMA and our members companies would support changes to simplify the process for all parties. The existing vast and complex supply chains that have been built in this country depend on the current model, so great care must be taken before any changes are made.
**Figure 10**

Implementation of US Tariff/Tax on Mexican Imports would create $16 - $27B of additional costs for the US automotive market

**Impact of 20% Tariff**
- Impact on full vehicles imported for sale in the US: 6.9
- Impact on Mexican components imported to be used in US production: 8.8
- Total = $15B

**Impact of 35% Tariff**
- Impact on full vehicles: 12.1
- Impact on components: 15.3
- Total = $27B

Source: BCG analysis

**Figure 11**

Impact of US Tariff/Tax on Mexican imports on production costs varies by OEM

- Tariffs add $650 - $1,150 on average to vehicle production costs across OEMs

<table>
<thead>
<tr>
<th>Incremental cost / vehicle for OEMs</th>
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<tbody>
<tr>
<td>CE1</td>
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<tr>
<td>-----</td>
</tr>
<tr>
<td>0</td>
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- Increased vehicle costs create two likely responses from consumers buying new vehicle

A) Make and Model Transfer: Customers may consider switching to makes and models less impacted by CAT

B) "De-content" vehicle: Reduced consumer spending power leads to removal of vehicle features, potentially including advanced safety and driver-assist technology

Illustrative examples

- Rearview Camera
- Parking Assist

Source: BCG analysis
It is important to realize that there is production already centered in the U.S., including metal forgings, glass, and small engines. The heavy vehicle industry manufactures wire harnesses and injection molding in the U.S. and exports these to Mexico. Mexico is also dependent on the U.S. production of steel, aluminum, and other raw materials.

In those instances when motor vehicle parts and components cross the border multiple times, the destination in the U.S. is often individual and separate suppliers. Therefore, the supplier industry spreads its employment throughout the country to both small, specialized manufacturers and larger, global companies. A change in the rules of origin could jeopardize all members of the supply chain. The industry believes that the focus needs to be on strengthening U.S. competitiveness through increased research and development and on manufacturing highly technical parts and systems in this country. These factors will drive job growth and ensure that the U.S. is at the center of innovation and high-tech product development.

Proposed Updates to NAFTA

As stated above, MEMA supports a renegotiation of the NAFTA that creates a more competitive U.S. manufacturing environment. MEMA urges that care be taken to balance the re-shoring of U.S. jobs with the unintended risks to jobs and the supply base. The final
NAFTA product must continue to provide for a vibrant North American supply chain, which supports U.S. jobs and competitiveness.

As NAFTA is updated, MEMA supports:

- **Establishing a level playing field for all parties**, and strongly supports initiatives that would eliminate unfair trade practices globally, including non-tariff barriers, that create unfair trade practices, such as testing and domestic content regulations;

- **Increasing and encouraging cooperation between countries and the industry to improve international trade**. NAFTA stakeholders should collaborate to create predictability and clarity in tariff codes including updating them to reflect new technologies and industries that did not exist in 1994;

- **Allowing flexibility** in key NAFTA provisions on how to qualify items because of the substantial manufacturing process in the region and to update the rules of origin that reflect current and future manufacturing environments;

- **Including investor-state disputes and other NAFTA forums** that could speed conflict resolution including tariff classifications;

- **Enforcing Intellectual Property Rights (IPR) protection** recognizing U.S. innovation, engineering, and development;

- **Aligning data protection and privacy laws** so that data can freely flow within NAFTA;

- **Ensuring that U.S. Federal Motor Vehicle Safety Standards** and other similar provisions are accepted in treaty countries;

- **Promote a harmonized regulatory system**, particularly working with Mexico to implement safety and environmental provisions that are in line with the U.S. and Canada;

- **Regulating the move and residence of laborers, their dependents, and business visitors across NAFTA** (for example, allowing for additional inner-NAFTA work visas beyond the current program);

- **Requiring that imports of all aftermarket parts** – including remanufactured goods – not to be treated differently from new goods imports;

- **Utilizing draft components of previous trade agreements** that are beneficial for all three countries (e.g. services, IPR).

**Conclusion**

MEMA members operate in a global industry with suppliers, customers, and facilities worldwide. Open markets and integrated supply chains provide the framework for
economic growth and jobs in our industry. NAFTA has served our industry, the American worker, and the U.S. economy well.

MEMA supports the administration’s efforts to update NAFTA. A modernized and renegotiated NAFTA should provide the U.S. with a framework for our industries, citizens, and national economy to thrive. MEMA urges the administration to renegotiate the NAFTA in such a manner to create a more competitive U.S. manufacturing environment. Care must be taken to balance the re-shoring of U.S. jobs with the unintended risks to current workers and the supply base. The final NAFTA product must continue to provide for a vibrant North American supply chain, which supports U.S. jobs and competitiveness.

MEMA stands ready to fully participate in the renegotiation process. Thank you for considering the comments of MEMA. We also look forward to making a statement at the USTR’s public hearing on June 27. For further information, please contact Senior Vice President of Government Affairs Ann Wilson at (202) 312-9246 or awilson@mema.org.

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MEMORANDUM

DATE: April 13, 2017

TO: The Honorable Elaine Chao
   United States Secretary of Transportation

FROM: Steve Handschuh, President and CEO
       Doug Grimm, Chairman of the Board of Directors

SUBJECT: Apprenticeship Programs in the Vehicle Supplier Industry

Introduction

The Motor & Equipment Manufacturers Association (MEMA) is the leading international trade association representing mobility component manufacturers. Vehicle suppliers directly employ over 871,000 Americans nationwide with a total indirect employment impact of 4.26 million jobs.

This memo is a follow up to our April 6 meeting in which you expressed an interest in the initiatives that many motor vehicle parts manufacturers have undertaken to support U.S. job growth. For many years, MEMA members have identified the hiring and retention of skilled workers as key challenges not only for our industry, but also the nation. According to a recent study, “Over the next decade nearly 3.5 million manufacturing jobs likely need to be filled. The skills gap is expected to result in 2 million of those jobs going unfilled.” The vehicle industry faces additional hurdles, as most young adults do not view this industry as a growth industry.

Throughout the country, the supplier industry plays an important role by participating in a variety of state, local and regional workforce-related endeavors to acquire talent and enhance employee training. During the 113th Congress, MEMA supported the Workforce Innovation and Opportunity Act, which modernized state workforce programs by providing customized training for local industries, increases reimbursement rates for on the job training, requires states to create a unified workforce plan, prioritizes the use of industry standards, eliminates outdated programs, and provides accountability and reporting requirements for programs.

After our meeting with you, MEMA asked member companies to self-report on apprenticeship programs nationwide. This memo summarizes the wide range of apprenticeship programs in the U.S. utilized by many suppliers. Should you require it, MEMA would be happy to provide you with a more structured report for your further review.

Vehicle Suppliers Utilize Apprenticeship Programs to Cultivate and Grow Talent

MEMA member companies partner with the U.S. Department of Labor, community and technical colleges, states, and private entities to provide apprenticeship programs. Companies involved in apprenticeship programs range from very large, global corporations with multiple facilities to local, small manufacturers with a limited number of facilities.

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1 MEMA represents its members through four divisions: Automotive Aftermarket Suppliers Association (AASA); Heavy Duty Manufacturers Association (HDMA); Motor & Equipment Remanufacturers Association (MERA); and, Original Equipment Suppliers Association (OESA).
3 The Skills Gap in U.S. Manufacturing 2015 and Beyond, Deloitte and The Manufacturing Institute, 2015.
4 “Among youth who don’t know anyone who works in the automotive industry, only 9 percent would consider an automotive-related career.” Block, Dustin. MLive.com article: Auto jobs aren’t attractive to young adults, survey finds, May 28, 2014.
5 Public Law No. 113-128, July 22, 2014
MEMA members sent us a range of ways they engage with these programs. These include:

- Close relationships with the States of Michigan and Kentucky
  - Michigan Advanced Technical Training Program or MAT2®  
  - Kentucky Federation for Advanced Manufacturing Education or KYFAME;
- Many focus on programs aimed at recent high school graduates as well as internal employer-provided educational and apprenticeship opportunities for current employees. (e.g. Borg Warner, Robert Bosch, Coastal, Inteva, INOAC);
- Programs vary in length and time commitments;
- Tuition free training;
- Focus on high school students (prior to graduation);
- Partnerships to attract students and provide educational and training opportunities,
  - e.g. high schools, local community colleges, technical schools, and other employers;
- Co-operative elements requiring the student to work in the manufacturing facility during the training period; and,
- Employment after the satisfactory completion of the term of study.

Vehicle Suppliers Need to Acquire and Retain Highly Skilled Workers

MEMA members are involved in all areas of STEM education including robotics, mentoring, internships, and apprenticeships. The advent of a major technology shift in transportation has underscored the need for trained workers requiring both traditional and advanced manufacturing skills. MEMA’s OESA fourth quarter survey (2016) asked a series of questions about talent recruitment and retention and reported the following:

- Skilled Labor Remains in High Demand and Short Supply
  Well over 50 percent of those surveyed strongly indicated they expect job growth and plan to hire more Engineers, Technicians, and Skilled Trades in both the U.S. and Mexico. However, an equally sizable number of respondents stated they are having difficulty finding and acquiring candidates for these types of positions. The challenge with filling these kinds of jobs is reaching a critical stage and reports show that the chasm is only getting wider.

- Turnover Adds to Labor Problems
  Over half of respondents indicated that turnover of hourly workers exceeds 3 percent, and over 25 percent of those surveyed have similar turnover rates for salaried workers. Strong demand for workers in the industry is leading to high turnover rates. Due to recruiting and retention needs force suppliers to respond by increasing appeal with higher health care contributions, more bonuses, and more training.

- Increased Training Part of the Solution, but Expensive
  It is widely agreed that internal training and development programs are the most likely to help mitigate loss of talent and to close the skills gap suppliers face. This translates to significantly increasing training budgets. Nearly 60 percent of respondents stated that training budgets for production workers and engineers must increase at least 10 percent, and, they believe, that a sizeable share of state budgets need to rise by 20 percent or more.

MEMA members are justifiably proud of their commitment to the future workforce. These programs will need to be expanded and amplified to meet the needs of the industry for a skilled and committed workforce. Please find attached appendices with comments and examples of how our members engage in these types of programs. We would be happy to answer your questions or provide you with additional information.

For more information, please contact Senior Vice President Ann Wilson at (202) 312-9246.

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6 VIDEO: Introduction to MAT2® [https://youtu.be/d0pc4L5iFXE](https://youtu.be/d0pc4L5iFXE)
7 VIDEO: Introduction to KYFAME [https://vimeo.com/129784308](https://vimeo.com/129784308)