Global Operations

INNOVATION • PARTNERSHIP • CONTINUOUS IMPROVEMENT

Mission

The GOPS mission is to Enable customer success by delivering cutting edge products and spares on time

GOPS builds KLA products and spares **Better, Faster and Cheaper**, supporting the KLA portfolio through their entire product life – through optimal use of People, Parts and Space – driving to be better in all areas making GOPS a competitive advantage for KLA while preserving core

GOPS History

Fifteen years ago, KLA Operations consisted of 11 distinct and unique manufacturing groups in the US and Israel, reporting directly to the product divisions. In 2005, those separate manufacturing entities combined to become a more efficient Global Operations Division leveraging standardization across all sites.

In 2006, the Singapore facility was built to expand operations and provide a footprint in Asia close to customers and suppliers. FaST moved manufacturing from the US to Israel. The ICOS and MIE acquisitions brought new

Core Competencies

Process Management and Quality Control is done in eQuality. This online tool defines and controls manufacturing processes and quality. Each product's assembly and test processes are defined and verified to assure full compliance before every tool ships. eQuality provides powerful tools to facilitate continuous improvement in processes, yields and out-ofbox quality. It tracks defects through resolution, collects process and performance data, provides real-time analysis tools and helps manage root cause and corrective actions.

Products

KLA currently has >30 products in production and 200+ legacy products supported worldwide. Volumes are single digit per month or quarter.

A diverse and complex supply-chain provides assemblies, OEM, fabricated and commodity piece parts to KLA factories. Last year GOPS combined purchased approximately 50,000 unique parts from more than 1,500 suppliers. 80% of the spend was with ~80 of those suppliers.

facilities Global Ops in Germany, Belgium and China during 2008. In 2015, Service Supply Chain Management and Pro consolidated with GOPS forming a single team responsible for supporting all current and legacy production and service needs. In 2017 GOPS built the Strategic Supplier Management organization to "Maximize value through globally aligned strategic supplier management." During this time, there were also numerous acquisitions including the largest, Orbotech in Israel.

Innovations

GOPS is at the forefront of a number of innovative initiatives. Examples are; leading the introduction of 3D printing spearheading the

Each year KLA introduces many novel, increasingly complex products to manufacturing. Introducing new products is a GOPS core competency assuring an efficient transition from development to manufacturing sites, while meeting time to market, cost and quality targets. Accelerated time to market and demand fluctuations present both challenges and opportunities in the cyclical, competitive semi-cap market.

Executing on new product deliverables, sustaining legacy products, managing readiness and flexibility to meet market challenges is our way of providing a

Competitive Advantage for KLA.

Germany Wales China

GOPS' >1,000 personnel, ~275,000 square feet of facility space, and ~250,000 square feet warehouse space are focused primarily on procurement, high-level assembly, system integration, optical alignment, field support, and test. A broad range of product complexity drives manufacturing cycle times from 4 to 180 days. KLA's flexible manufacturing groups excel at managing these high-complexity, high-mix and ultra-low volume products in a volatile market.

Roadmap

GOPS is a competitive advantage for KLA. Customer satisfaction relies on the ability to deliver and service tools when committed, at the levels of quality and performance that the KLA brand promises. With fewer, bigger customers, a growing fleet, and an increasingly more competitive environment, GOPS' strategic focus is on customer delivery, quality, service, cost and ramping new products faster.

manufacture KLA internally designed lasers and bringing contamination testing into GOPS. These initiatives required building a state of the art clean room and crystal condition fixture, and developing cleanliness, handling, design, training, shipment, and storage BKMs

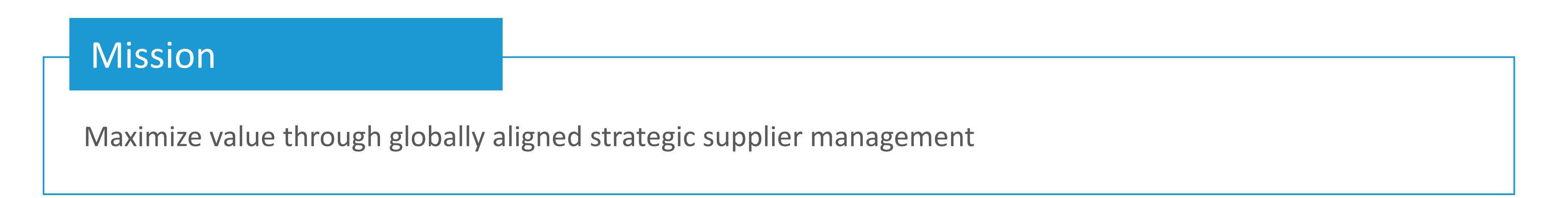


KLA Non-Confidential | Unrestricted



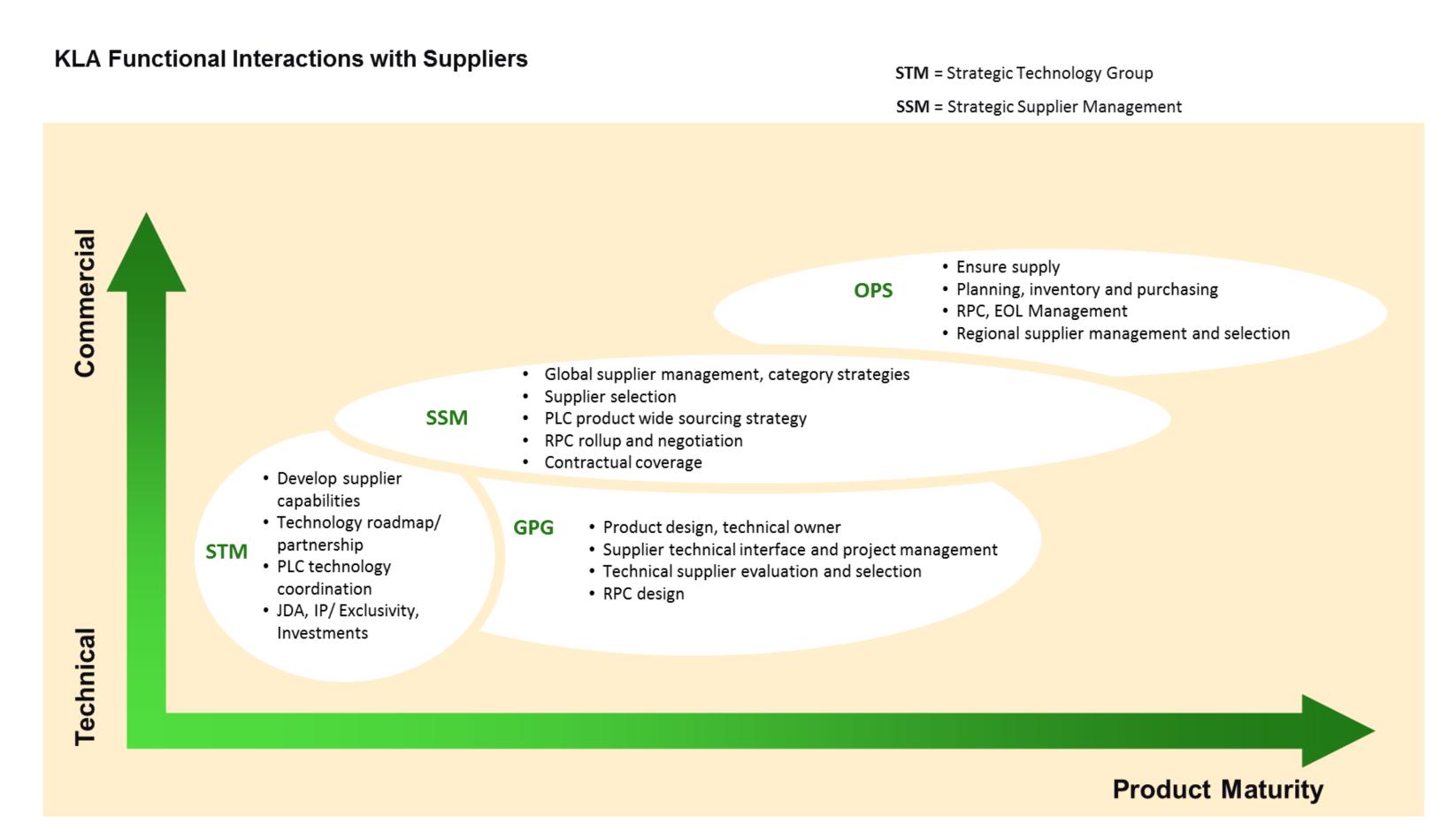
Strategic Supplier Management

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Strategy

From early concept to late product maturity, many functions interact daily with our suppliers. A centralized global Strategic Supplier Management (SSM) function drives "One Voice" of KLA for our suppliers.



Structure

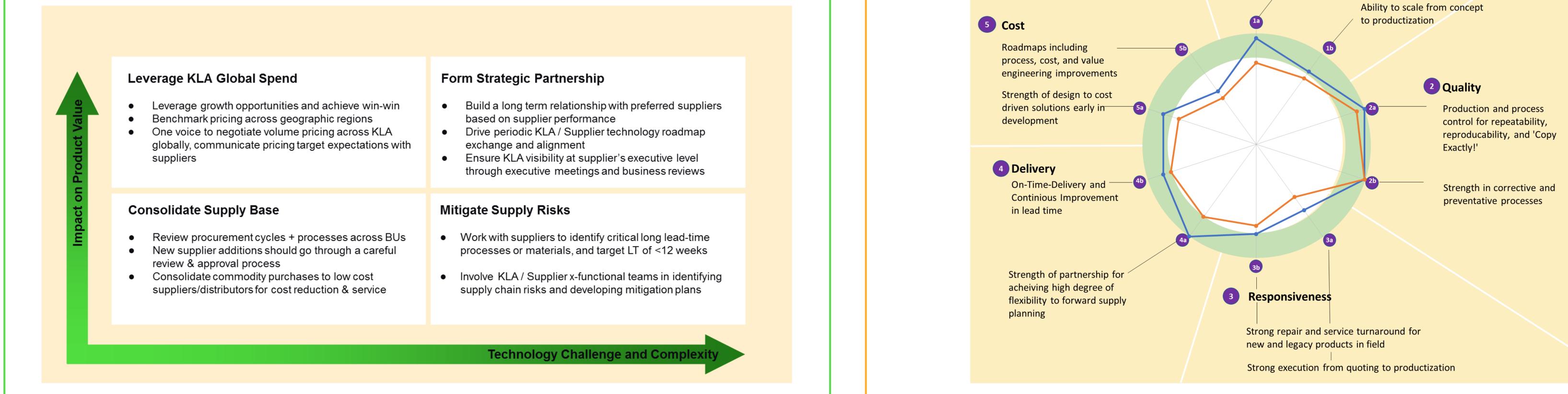
The **Category Management** function delivers long range **global** strategies across the organization through **establishing** and managing supplier relationships.

The New Product Launch function drives business to preferred suppliers in line with the category strategies.

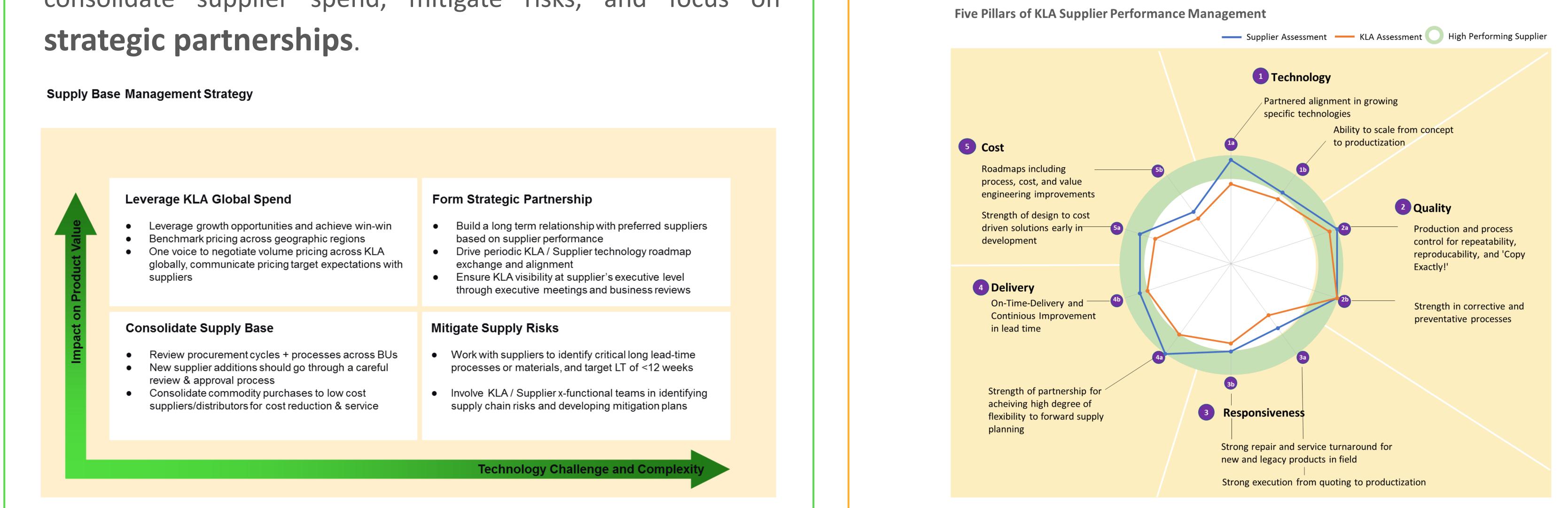
Supplier Performance

KLA Supplier Managers drive business reviews for key suppliers.

SSM continually reviews its supply base to drive better value, consolidate supplier spend, mitigate risks, and focus on



These include scorecards with multi-functional global input which assess and communicate supplier performance. High performers receive preferential standing for new program sourcing. Each year, this and other data is used to determine recipients of the **Supplier Excellence Awards**.







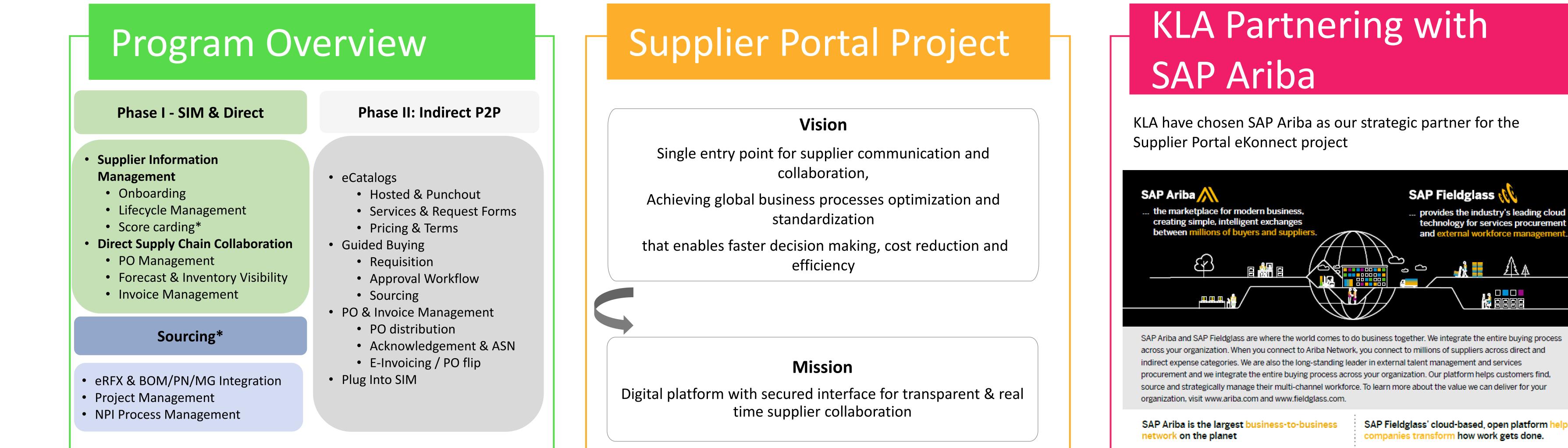
KLA Supplier Portal Project - eKonnect

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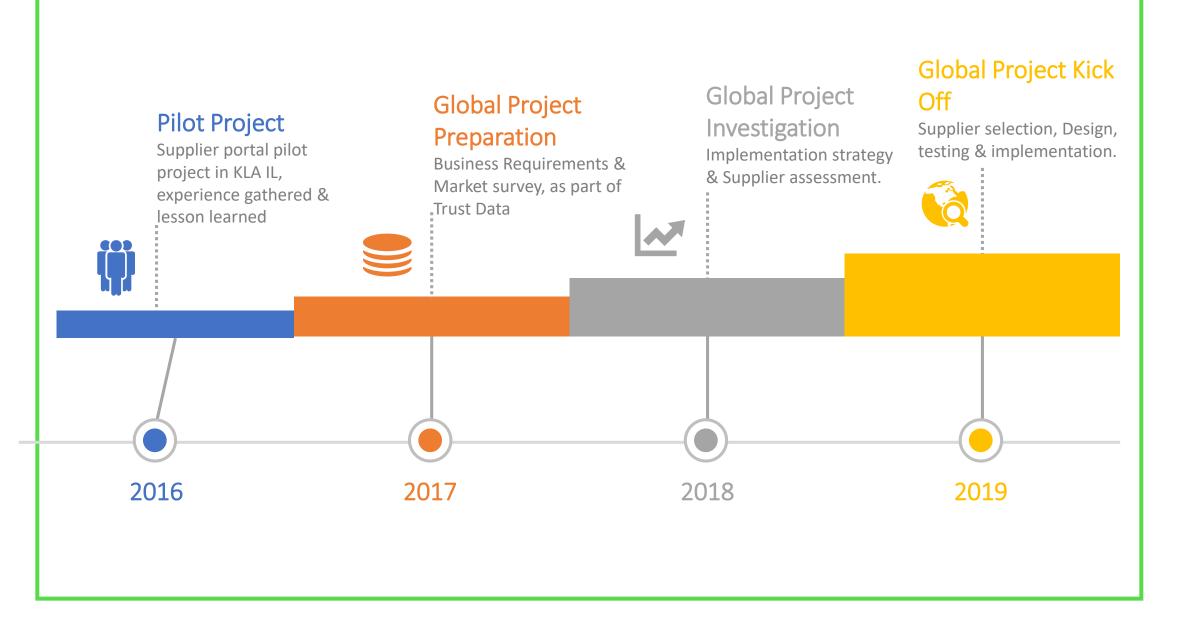
KLA Supplier Portal Project - eKonnect

KLA Global Operation has been leading a "Trust Data" initiative with the purpose of Simplify, Standardize & Digitize processes & systems. As a leading technology company, KLA is driving innovation, partnership & continuous improvement in the supply chain area. The Purpose of the supplier portal project is to enhance KLA collaboration with our partners in the supply chain by having a single entry point for supplier communication & collaboration

eKONNECT supplier portal



Supplier Portal – Project Time Line



Project Benefits







Suppliers Compliance

Why do our suppliers need to participate?

1. The Supplier Portal eventually will become required by any supplier dealing with KLA.

2. Wide adoption will result in a more transparent and real time

collaboration with KLA suppliers

3. The participation doesn't require payment for KLA direct

suppliers





KLA Responsible Business Alliance (RBA) Program

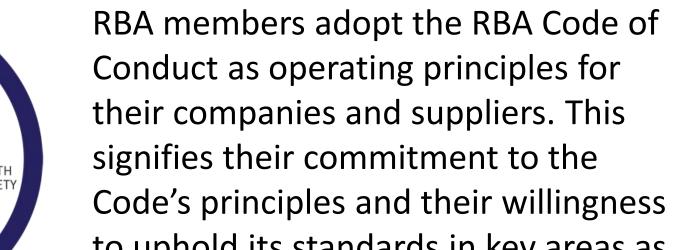
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RBA Overview

The RBA (formerly the EICC) is a coalition of the world's leading companies working together to improve efficiency and social, ethical, and environmental responsibility in the global supply chain.

The RBA Code of Conduct was established to ensure worker safety and fairness, environmental responsibility, and business efficiency. The RBA Code of Conduct can be found at:

RBA Code of Conduct



Message from the CEO

66 We foster sustainability and social responsibility through our people, technologies and ongoing commitment to our global and local communities.





Advancing Sustainability Globally

http://www.responsiblebusiness. org/standards/code-of-conduct/



to uphold its standards in key areas as Labor, Health and Safety, Environment and Ethics.

- Rick Wallace, Chief Executive Officer, KLA Corporation

Supplier Compliance

KLA's Expectations of Supplier Compliance to the **RBA**

RBA compliance is a key requirement for all suppliers as stated in the Purchase Order and other Supplier Agreements with KLA.

Supply Chain Human Rights Policy

KLA expects its supply base to adhere to global principles of human rights that includes freedom of association, right to organize, abolition of forced labor, elimination of child labor, equality and anti-discrimination rights, payment of minimum wages and provision of legally mandated employee benefits. For more information, the KLA Supply Chain Human Rights Policy can be found at:

https://www.kla.com/documents/2019/Supply-Chain-Human-Rights-Policy.pdf.

Corporate & Facility SAQ

- KLA through the RBA provides the following:
 - Information for each supplier to establish an online account to access the SAQs
 - Provides access to on-boarding support
 - Provides self-help guides and annual notification of when to complete the annual SAQs
- 2. SAQ requirements:
 - Suppliers in the top 80% of each of KLA plant's spend by region (US, Singapore/SEA, Germany, and Israel) would need to complete a SAQ each calendar year for the Corporate Level and each Facility Site
 - Facility Site is the site that manufactures and ships product to KLA
 - Based on these assessments, suppliers would be assigned risk categories depending on score (High, Medium, Low)
 - Detailed third party Validated Audit Process (VAP) assessments are required on 25% of those suppliers in the

RBA Resources

To hold members accountable to RBA standards and membership requirements, the RBA provides assessment tools to members to help them measure and better understand how they are meeting RBA standards and requirements, and what gaps remain.

Self-Assessment

- Designed to help members identify their greatest social, environmental and ethical risks in their supply chains so they can take action to remedy existing Code of Conduct violations, and put in place systems to prevent violations from occurring in the future.
- RBA provides its members with a risk assessment template that they may use called the Self-Assessment Questionnaire (SAQ), as well as a high-level risk assessment tool.
- For more information on the SAQ please view the SAQ FAQ at: http://www.responsiblebusiness.org/tools/saq-faqs/

RBA Validated Assessment Program (VAP)

One of the most fundamental programs is the VAP, which is the leading standard for onsite compliance verification and effective, shareable audits. The RBA itself does not conduct audits but rather sets the standards and relies on approved audit firms. For more information on the VAP, please visit the following site: http://www.responsiblebusiness.org/media/docs/VAPoverview. pdf

Why do our suppliers need to participate?

Compliance is required by our customers and aligns with KLA's dedication to Corporate Social Responsibility which can be found at:

https://www.kla.com/documents/KLA_Report_CSR_2018.pdf.

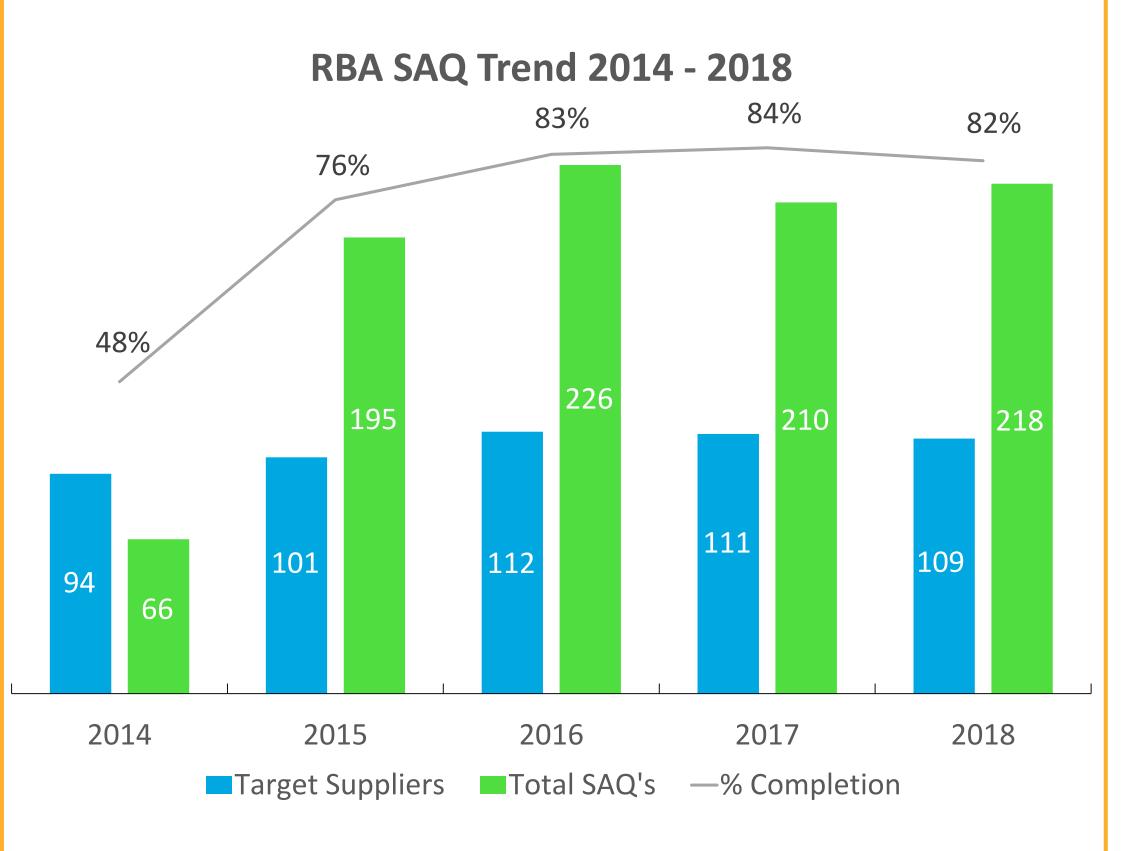
- 2. RBA Code of Conduct aligns with basic human rights, environmental, ethics and labor standards most companies have in place already.
- 3. Eventually will become required by any supplier dealing with a member company.
- 4. Wide adoption will result in a more transparent and socially responsible supply chain.
- 5. KLA requires its suppliers to participate in the annual Self Assessment Questionnaire (SAQ) assessments.

KLA RBA Membership

Why is membership important to KLA?

- Membership helps enable a supply chain that consistently operates with social, environmental and economic responsibilities
- Membership assists the company in coping with an increasing

- High risk category
- 3. RBA provides tools to audit compliance with the code, and help companies report progress.



During KLA's previous RBA campaigns, suppliers have had a healthy

RBA Training Resources

RBA offers its members and their suppliers a range of training opportunities, ranging from an extensive online e-learning platform to in-person trainings offered in multiple languages. RBA trainings are designed to support all learners on their path to leadership in supply chain sustainability.

RBA e-Learning Academy

The RBA e-Learning Academy, launched in April 2014, provides RBA members with best-in-class online training on a range of sustainability topics from CSR program management to methods to combat trafficked and forces labor in the supply chain. The e-Learning Academy also offers training resources about RBA tools, such as RBA-Online and the Validated Assessment Process. If you would like to contact the RBA regarding questions or contributions for its e-Learning Academy, please email RBA at: training@responsiblebusiness.org

RBA In-Person Trainings

The RBA offers its Code of Conduct and VAP Audit Preparation course several times a year in multiple locations. The RBA has

number of regulatory compliance initiatives – Many of KLA's customers are also members

A list of current RBA members can be found on the RBA website: http://www.responsiblebusiness.org/about/members/

KLA became a member in the RBA in April 2016

response rate to the SAQ requests and KLA is expecting it's suppliers to help KLA continuously improve this response rate to meet KLA's target of 85%-90%.

also partnered with service providers on other trainings in the past, including Worker management Communication Training, Health and Safety Training, and Industrial Hygiene. For more information on RBA events and training sessions please visit:

http://www.responsiblebusiness.org/training-events/





KLA Conflict Minerals Program

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KLA Supplier Expectations for Responsible Sourcing of Conflict Minerals

KLA is committed to complying with Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act relating to the use of "conflict minerals." We expect our suppliers to be aware of this requirement and to respond in a timely manner to KLA's survey requests through our third-party provider, Assent Compliance. We expect that suppliers will take reasonable, good faith steps towards assisting KLA to achieve its compliance obligations.

1. KLA expects its suppliers to respond to a Responsible Minerals Initiative (RMI) Conflict Minerals Request Template (CMRT) survey each year covering all of the products supplied to KLA in that year. 2. KLA expects its suppliers to respond within two weeks of receipt of the survey, or committing to an estimated completion date before the end of the year. Should you have any questions or concerns in complying with KLA's Conflict Minerals requirement, please email us at: <u>Conflict-Minerals@kla.com</u>

Program Overview

Dodd-Frank Section 1502

Requires US publicly listed companies to report annually on efforts to identify the country of origin of specific "conflict minerals" in their supply chain and determine if they came from the Democratic Republic of Congo or adjoining countries

Conflict Minerals identified as Tin, Tungsten, Tantalum, and Gold (known as 3TG)

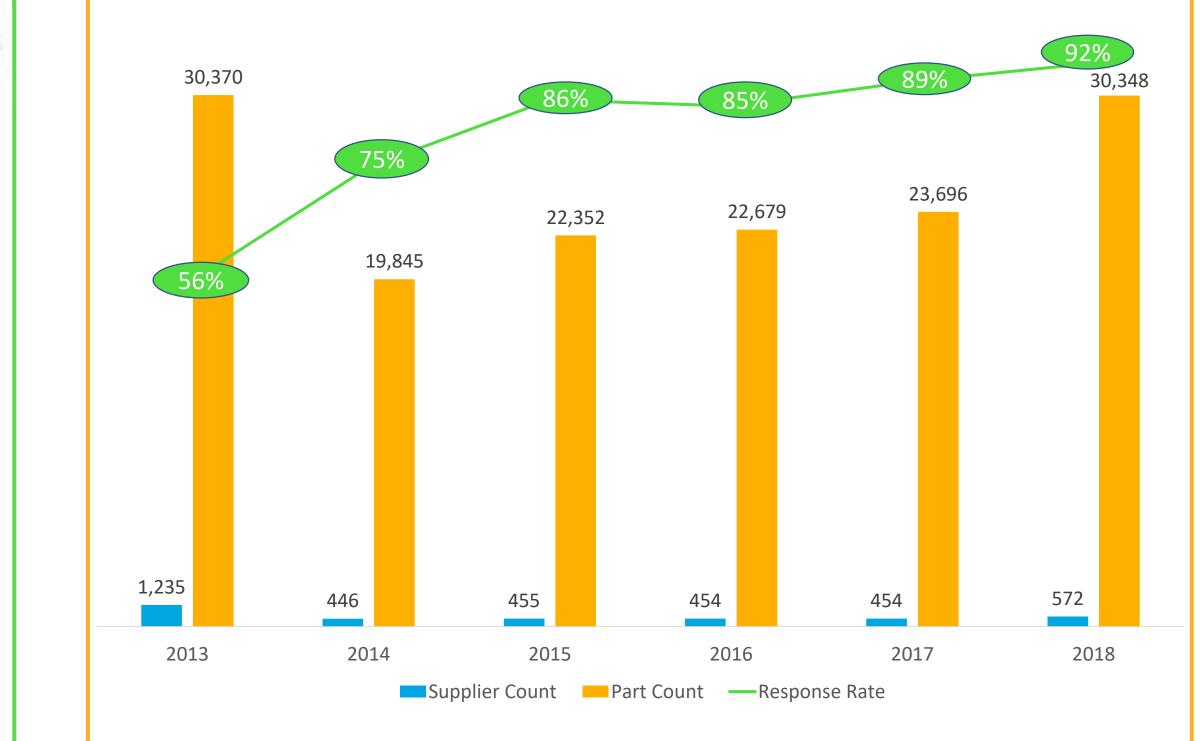
KLA will take steps to reasonably ensure the conflict minerals necessary to the functionality or production of its products are conflict free.

Step 1: An issuer needs to determine whether its manufactured products contain conflict minerals that subject it to the requirements of Dodd- Frank Section 1502	Step 2: An issuer needs to determine whether its necessary conflict minerals originated in the Covered Countries	Step 3: An issuer with necessary conflict minerals from Covered Countries that are not from recycled or scrap sources needs to conduct due diligence and potentially provide a Conflict Minerals Report
 Analyzed supply base for likelihood of conflict mineral content Determined suppliers that were in scope by part category and detailed technical review 	 Continued engagement with 3rd Parties to assist in the survey administration Joined the Responsible Minerals Initiative (RMI) and incorporated Smelter data into the RCOI review Employed risk based approach prioritizing high spend suppliers Performed necessary due diligence on supplier responses 	 Followed the Internal governance structure to oversee compliance with the Act Conducted trainings internally Updated specific Internal procedures for compliance Developed a Special Disclosure and Conflict Minerals Report per Dodd-Frank requirements

KLA CM Program Trends

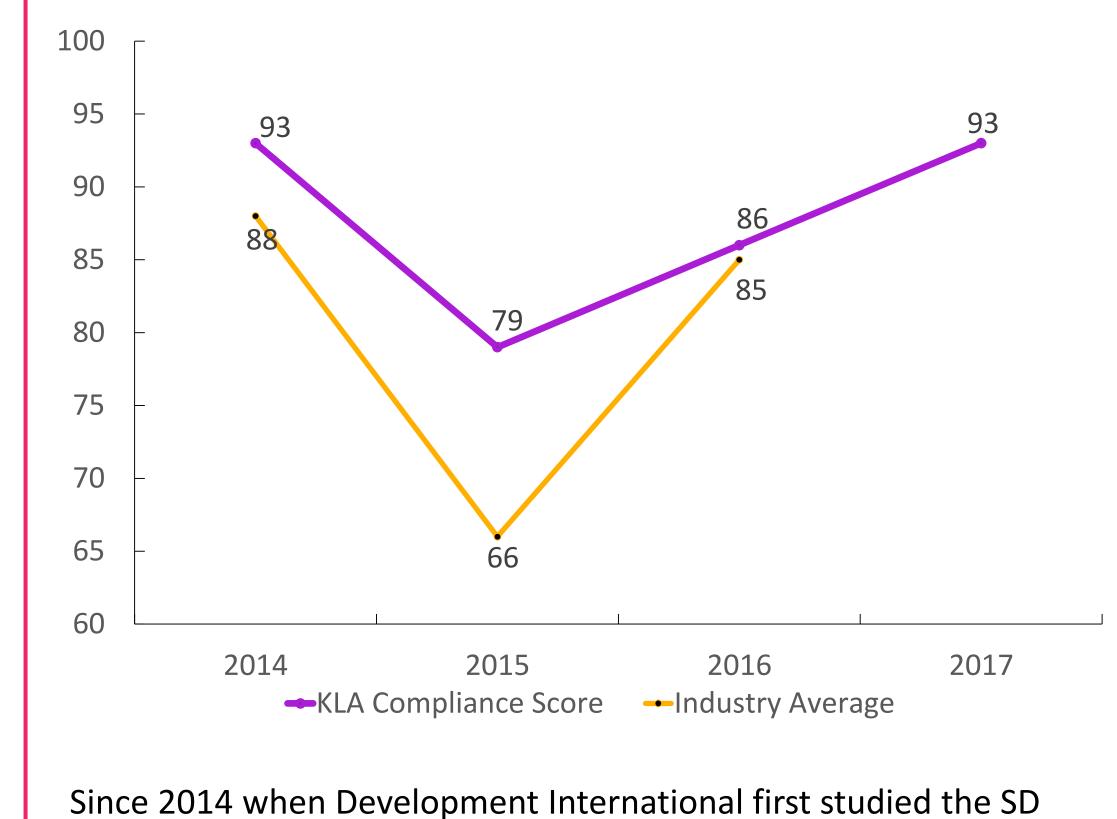
Since the beginning when the compliance obligation was first introduced, KLA has filed both a Form SD and a CMR to the SEC on an annual basis. Besides the first program year of 2013, KLA targets suppliers that fall in the 99% of spend. However, the number of parts identified as potentially containing 3TGs has been increasing.

KLA CM Program Trend of Supplier Count, Part Count and Response Rate



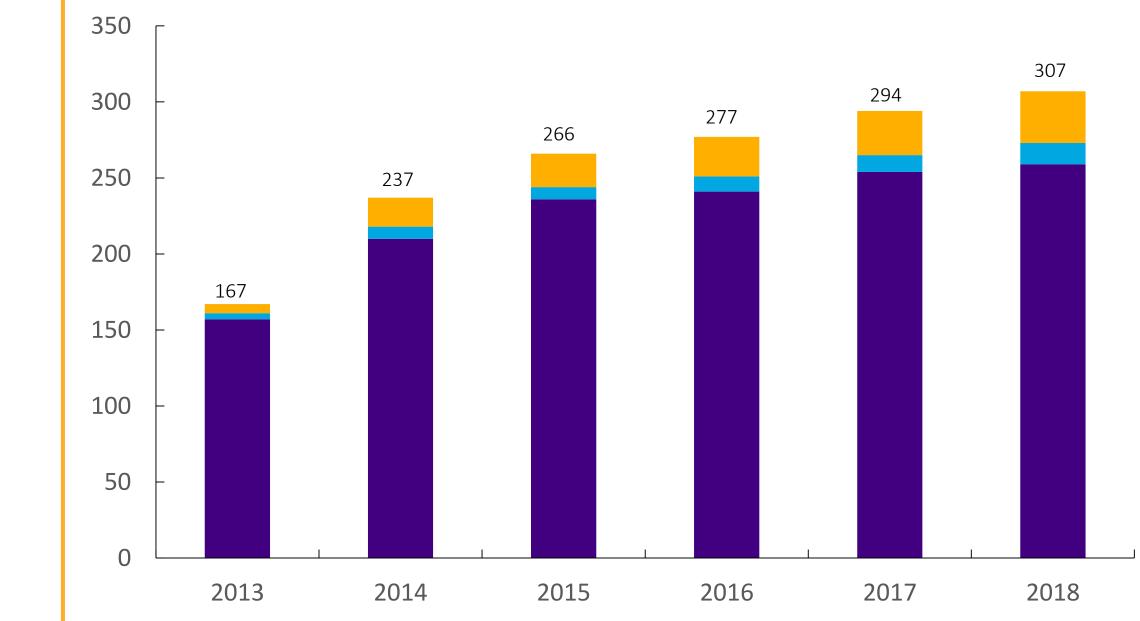
KLA Compliance Score

KLA Compliance Score compared to Industry Average



The Reasonable Country of Origin Inquiry (RCOI) supplier response rate has been improving each year with the most recent 2018 campaign reaching 92%, exceeding the target response rate of 85-90%. We look forward to our suppliers providing another strong response for our 2019 campaign.

Smelter Status Metrics 2013 - 2018



and CMR filings, KLA has received a compliance score above the industry average. In 2017, Development International did not create a detailed scoring and analysis although KLA's compliance score did improve from the previous year and achieved its highest benchmark score of 93.

Assent Compliance

For the 2019 Conflict Minerals Campaign, KLA has chosen Assent Compliance as its third party compliance platform. Assent Compliance provides cloud-based SaaS solutions that help companies manage their supply chain data. KLA utilizes Assent to manage its Conflict Minerals Program.



Assent's Conflict Mineral Module

Assent's Conflict Minerals Module will help KLA gather, store and validate conflict minerals data while streamlining supply chain communications. The automated outreach and monitoring ensures that all relevant data is collected and validated for compliance with regulatory obligations.

RMI was founded in 2008 by members of the SPONS/S

Responsible Business Alliance and the Global e-Sustainability Initiative. The RMI has grown into one of the most utilized and respected resources for companies from a range of industries addressing responsible mineral sourcing issues in their supply chains.

RMI Overview

Responsible Minerals Assurance Process (RMAP)

RMAP helps companies make informed choices about responsible sourced minerals in their supply chain. RMAP uses an independent third-party assessment of smelter/refiner management systems and sourcing practices to validate conformance with RMAP standards and current global standards.

Join the Initiative! www.responsiblemineralsinitiative.org/membership/ ■ Compliant ■ In Process ■ Outreach Required

KLA has been improving every year in the collection of compliant smelter data. This data relies on the RMI reported data of 3TG compliant smelters in covered countries. KLA continues to achieve its compliance obligations regarding conflict minerals.

Assent Compliance will be the one reaching out during KLA's next Conflict Minerals Campaign under the email address: supply.compliance@subsc.kla.com





Corporate Social Responsibility

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Sustainability and KLA Foundation

Since our inception over 40 years ago, KLA has always held sustainability, corporate citizenship and environmental responsibility as core values, interwoven with everything we do. By focusing on improving yield and efficiency for our customers, KLA helps reduce the overall environmental impacts of the global semiconductor industry. We are committed to managing, measuring and improving our sustainability practices in all internal production facilities, supply chains, partnerships and other corporate activities. We believe that a responsible company needs to be an active and beneficial participant where we live and do business. It is a privilege to be part of a community and we welcome the opportunity to give back. Our official CSR report can be downloaded at https://www.kla.foundation/.

Environmental Initiatives

KLA is dedicated to complying with all appropriate, relevant environmental laws and standards worldwide. KLA has been registered to the ISO 14001 standard since 2003 and strives to continuously improve its environmental performance.

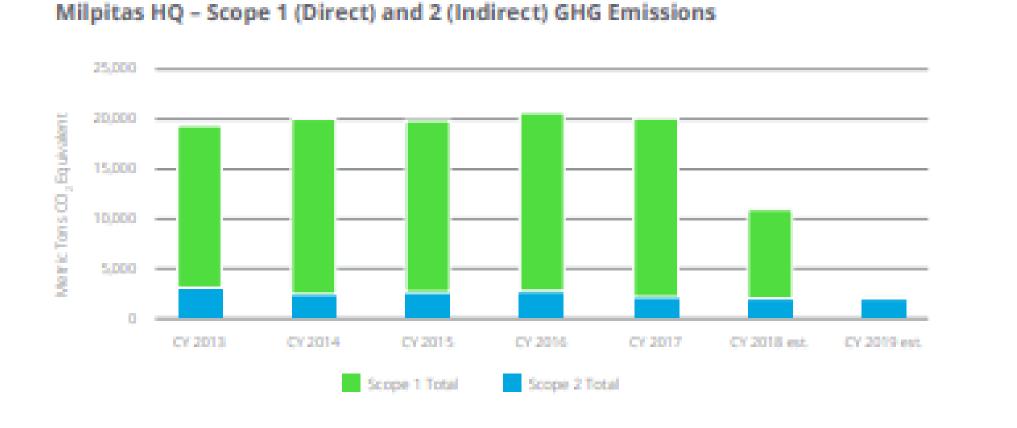
In 2018, KLA HQ elected to purchase electricity from 100% renewable sources. This change significantly reduced overall emissions from the previous year, saving over 7000 metric tons of CO2 equivalent (CO2e), and has completely eliminated indirect emissions for 2019.

Foundation Overview

The KLA Foundation is an activator, bringing communities and employees together to make a positive and lasting impact. We inspire employees to give their own time, talent and treasures. Driven by the mission statement "improving lives where we work and live," the Foundation strives to form and nurture strategic partnerships in four key areas. Our four main pillars of focus are STEM education, Wellness, Local Community, and Diversity and Inclusion. Over the last seven years, KLA has invested more than 10 million dollars in community organizations, driving innovative programs that create a better world. KLA and the KLA Foundation believe in working collaboratively with and for our employees to enrich our communities and support meaningful causes. At KLA, giving back is not just a matter of money; it also means fostering and supporting the personal involvement of employees and management at every level as they use their talents, interests and commitment for the good of our extended communities.

Social Programs

KLA's core values are what sustain our ongoing market leadership and technology innovation. We value a diverse workforce and foster an environment of understanding built on global culture, skills and knowledge. As a global employer, KLA recognizes that there are differences in labor laws and practices around the world and that not every jurisdiction applies discrimination, harassment and work rules standards at the same level, however, KLA has established and trained employees on a Global Labor Standard, addressing child labor avoidance, humane treatment, anti-discrimination, and



KLA continues to raise awareness about solid waste diversion and composting. Last year saw a significant drop in recycled waste by encouraging increased use of reusable containers. In 2019 KLA will continue to focus on solid waste reduction and elimination for our sites worldwide, including the gradual removal of plastics from the waste stream. We believe that every reduction can make a positive impact.



In 2018, KLA & KLA Foundation contributed \$3.4 million



much more, that is implemented in all of its sites worldwide.



Community Contributions

Interactive, community-based programs are
an essential component of how we connect
with needs and interests of the communities
we serve. In 2019, KLA Foundation hosted its
first Robogames, a STEM-based
demonstration day that brought nine local
FIRST robotics high school teams to KLA. KLA
Foundation also partnered with the SEMI
Foundation to bring SEMI HTU to India for the
first time. This three-day immersive program
exposes students to a range of opportunities
in the high-tech industry.





KLA's Product Portfolio

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KLA's Inspection and Review Portfolio

Chip and Wafer Manufacturing



Comprehensive wafer defect inspection and review portfolio supports defect discovery, process optimization and production monitoring

KLA's Metrology Portfolio Chip and Wafer Manufacturing





PWG3™

Patterned Wafer Geometry

WaferSight[™] 2+

Bare Wafer Geometry

Therma-Probe® 680XP

lon Implant

RS-200

Film Resistivity

SensArray®

In Situ Monitoring





Comprehensive metrology and in situ process monitoring portfolio supports process optimization and patterning process control

KLA's Product Portfolio

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KLA's Reticle Manufacturing and Quality Control Portfolio



Inspection, metrology and data analytics systems identify reticle defects and pattern placement errors, reducing yield risk

KLA's Packaging Portfolio







ICOS™ T890

Tray-tray Inspection,

CIRCL[™]-AP All-Surface Wafer Inspection



Zeta-580/680 Wafer/Panel 3D Metrology



ICOS[™] T3 and T7 Series Tray-tray and Tray-tape Inspection, Metrology



WI-2280 Multi-Substrate Inspection, Metrology



Klarity® Data Analysis and Management

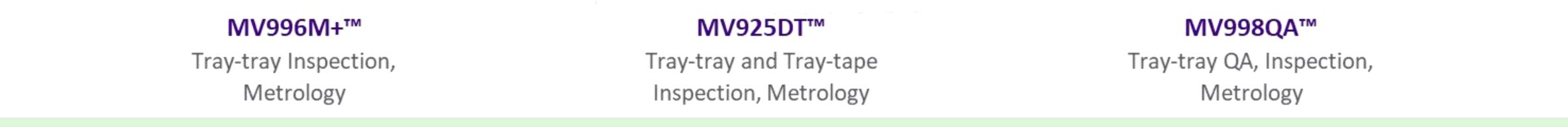


ICOS™ F160 Wafer/Tape Inspection, Die Sort









Inspection, metrology, die sorting and data analytics systems help increase quality and yield in packaging processes





KLA's Product Portfolio

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KLA's Specialty Device Markets Portfolio LED, MEMS, Data Storage, Power Devices, Display



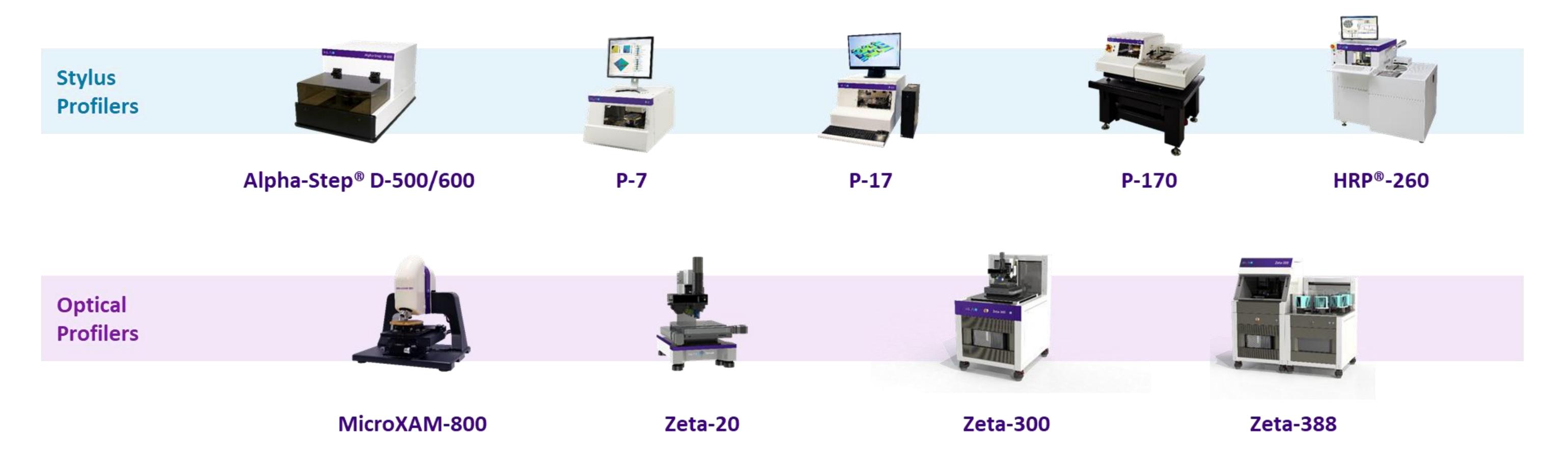


Standards and Reference Cells



KLA's Instruments Portfolio

Profilers and Nanomechanical Testers





T150 UTM InSEM[®] HT iNano[®]

®

NanoFlip







