THE IMPACT OF ALSTOM IN KAZAKHSTAN

2022 Report





Content

FOREWORD

METHODOLOGY

ALSTOM AT A GLANCE

Alstom Group Alstom in Kazakhstan

ALSTOM'S IMPACT IN KAZAKHSTAN

1. Making mobility safer & more sustainable

Decreasing the environmental impact of mobility
Decreasing Alstom's operational environmental footprint
Developing and modernising the country's network

2. Building a local industrial ecosystem

Contributing to Kazakhstan economy Developing local capability Partnering for growth

3. Growing our people

Helping employees grow Creating a diverse and inclusive environment Providing a safe work environment

4. Community Engagement

Employee volunteering Alstom Foundation Foundation projects

FUTURE OUTLOOK

Foreword





Welcome to Alstom's first socio-economic impact report in Kazakhstan. The intention of this report is to create a baseline understanding of the impact of our work with our partners and use it as a tool to measure our progress moving forward.

Kazakhstan is a natural hub, linking Europe and Asia through the new Silk Way. We see high potential for the country as a rail hub providing a pathway to China as well as being a major transporter of goods within the continent. Throughout this report you will see how Alstom is partnering with local stakeholders to support capacity building within the rail industry and address the mobility needs of the country.

Our presence in the country started in 2010 with the establishment of a new plant to manufacture electric freight and passenger locomotives with KTZ (Kazakhstan Railways) called EKZ. Over the last 12 years, Alstom has built a strong presence that includes 8 sites with over 1,000 employees. We are moving beyond locomotive production and growing local services activities and the production of railroad safety equipment such as point machines. Over 3,700 point-machines have been manufactured in Almaty to date (Aug 15, 2022) and each day that number increases. We remain the only manufacturer of electric locomotives and point machines in Central Asia. I'm glad we could partner with EY, to make this study possible and highlight our commitment to Kazakhstan's sustainable future.

WE REMAIN THE ONLY
MANUFACTURER OF
ELECTRIC LOCOMOTIVES
AND POINT MACHINES
IN CENTRAL ASIA





For more than a decade, Alstom has accompanied Kazakhstan in the modernisation and development of its transportation network. Alstom contributes to the industrial development of Kazakhstan. It also aims at ensuring the sustainability of mobility, and positively impacting the daily life of the population through the solutions it offers, but also through its social and community commitments.

The study, conducted by EY, focuses on the impact of Alstom in Kazakhstan and is based on the identification, computation and evaluation of more than 60 KPIs connected to Alstom's CSR strategy pillars. These socio-economic indicators rely on a state-of-the-art methodology involving Alstom data and the use of external databases (EORA), and uses a multi-regional input-output model, enabling the quantification of Alstom's contribution to Kazakhstan's development in terms of jobs and value creation. This approach enables Alstom to better assess and measure its impact on stakeholders. It also demonstrates and strengthens Alstom's commitment to maximise its positive impact on the communities in which it operates.

Methodology

SCOPE OF THE STUDY

The numbers and statistics given are for the fiscal year 2021/22. In some cases, a * is attached to the number presented. For those numbers specifically, the scope considered is the fiscal year 2020/21.

SOCIO-ECONOMIC FOOTPRINT

The model used by EY to represent the socio-economic rippling effect within a given territory is based on the work of economist Wassily Leontief, who earned the Nobel Prize in Economics in 1973. This research is centred on the use of symmetric input-output tables to simulate the interdependence of all sectors of an economy. Moreover, since the model is linear, any economy of scale is ignored.

By combining this modelling of the economy along with the employment intensity of each sector, it was possible to determine the indirect and induced socio-economic benefits. Those results are being derived from all Alstom's activities worldwide and all global procurement. They are displayed at a national level but reflect the global supply chain of Alstom along with the goods and services exchange made between economic actors of all the countries in the world.



The contribution of the activity/ entity itself to the economy (e.g. in terms of the number of employees working for Alstom).



To "produce" direct effects, a company needs to acquire goods and services (e.g. scrap metal, electricity, technical analysis services etc.) from suppliers. Those suppliers increase their production and hire additional staff in order to meet the demand of Alstom. Suppliers themselves cooperate with additional firms (their suppliers), creating a second-rank effect that is also part of the indirect effects generated by the company. The model adds up first-, second-, third-rank effects along the supply chain. Socio-economic impact (jobs and GDP) generated by surplus of demand in the value chain are indirect impacts.



Induced effects are the results of increased household expenses caused by the labour income of direct and indirect jobs. Employee spending generates more demand in the economy, which leads to more production and, in turn, more profits, value-added (GDP contribution), employment, taxes, and so on.

ALSTOM at a glance

ALSTOM Group



Leading societies to a low carbon future, Alstom develops and markets mobility solutions that provide the sustainable foundations for the future of transportation.

Alstom's product portfolio ranges from trams, monorail, metros, regional trains, and high-speed trains to integrated systems, customised services, infrastructure, signalling and digital mobility solutions. Alstom has over 150,000 vehicles in commercial service worldwide. With Bombardier Transportation joining Alstom on January 29, 2021, the enlarged Group's combined proforma revenue amounts to €15.5 billion for the 12-month period ended March 31, 2022. Headquartered in France, Alstom is now present in 70 countries and employs more than 74,000 people.



Over **74,000** employees worlwide



Working with 23,000 suppliers worldwide



Over 250 sites in 70 countries



More than

9,500 patents



Over **150,000 vehicles** in commercial service



17,500 engineers

ALSTOM at a glance

ALSTOM in Kazakhstan

Alstom's relationship with Kazakhstan started in 2010 and since has established a significant industrial base with over 1,000 employees working to address national mobility's needs and the revitalisation of the country's rail industry. Alstom is the only manufacturer of electric locomotives and point machines in the Central Asian and Caucasian region.

Today, Alstom's footprint spans across 8 sites, in addition to troubleshooting areas located at 3 customer premises in Tobol, Ekibastuz and Almaty

- > EKZ in Astana for electric locomotives production
- > A JV with KazElectroPrivod (KEP) in Almaty for the production of point machines
- > Three service depots in Astana, Arys and Shu
- > One repair centre in Astana
- ➤ Corporate Office in Astana
- ➤ Bogie Centre in Astana





KEY FIGURES

1,000+ EMPLOYEES

8 SITES

LOCOMOTIVES

245
LOCOMOTIVES TO
BE SUPPLIED

10,000 POINT MACHINES TO SUPPLY

OUR FOOTPRINT





EKZ Astana site

Inauguration: December 2012 Staff: 900+ people Surface: 35,000 m²

Mission:

- ➤ Manufacturing of electric locomotives from Prima range: KZ8A, KZ4AT and AZ8A for export
- > Manufacturing of onboard transformers
- > Service activities for KZ8A and KZ4AT fleets

ALSTOM impact in Kazakhstan

Highlights

April 2021 - March 2022

€126 M

INVESTED TO BUILD LOCAL MANUFACTURING CAPABILITY FROM 2010 TO 2022



€40 M

INDIRECT AND INDUCED GDP CONTRIBUTION



€32 M

WORTH OF GOODS AND SERVICES PURCHASED FROM 342 LOCAL SUPPLIERS

12 Years

IN COUNTRY

Onlypoint

MACHINE AND ELECTRIC LOCOMOTIVES PLANT IN CENTRAL ASIA



LOCOMOTIVE CONTENT PRODUCED LOCALLY



6%

OF ALSTOM FOUNDATION'S TOTAL BUDGET IN 2018-2021 ALLOCATED TO KAZAKHSTAN

2,750

BENEFICIARIES OF ALSTOM FUNDED COMMUNITY PROJECTS SINCE 2018

€250,820

INVESTED IN LOCAL COMMUNITY PROJECTS SINCE 2018

2,635

DIRECT, INDIRECT, AND INDUCED JOBS SUPPORTED



1,079 +

NUMBER OF EMPLOYEES



OF TRAINING DELIVERED ON AVERAGE PER EMPLOYEE IN 2021 (EXCLUDING SAFETY TRAINING) 19%

OF EMPLOYEES ARE WOMEN



SEVERE ACCIDENT
IN 2021

97% OF LOCOMOTIVE COMPONENTS ARE RECYCLABLE



TRAINS SOLD IN KAZAKHSTAN EMIT LESS 9CO₂/PASSENGER.KM THAN CARS

Making mobility safer & More sustainable

DECREASING THE ENVIRONMENTAL IMPACT OF MOBILITY

Alstom plays a key role in sustainable transportation. Rail is currently the cleanest and most energy-efficient transport mode and will remain the backbone of mobility in a sustainable world.

Alstom has established a method to assess CO₂ emissions over the whole lifecycle of its products sold, including raw materials and components sourcing, logistics, production and the use of the products. Accordingly, trains sold in Kazakhstan emit overall 8,3 gCO₂/passenger.km, that is 89% less than cars! Alstom's commitment to eco-design is centred on minimising the environmental footprint of its solutions throughout their lifecycle. This approach is already applied to more than 50% of Alstom products with a target of having 100% of all new products by 2025. In this regard, 97% of the KZ4AT/KZ8A locomotive components in country are recyclable, thus ensuring a minimal end-of-life impact.

DECREASING ALSTOM'S OPERATIONAL ENVIRONMENTAL FOOTPRINT

Alstom is committed to limiting the environmental impact of its operations in Kazakhstan and worldwide. The company is looking to reduce its energy consumption, waste, and carbon footprint throughout the facility in EKZ. We are in the process of receiving ISO 14001 certification for EKZ and have outlined a full strategy to reduce energy intensity, carbon emissions and waste at our site. Some of the initiatives in place include:



Waste management

- Estimated reduction of 50% waste by end of 2022.
- Press machines installed in June 2022.
- Waste collection area arranged in September 2022.
- Wood waste shredder to be installed in November 2022.



Water saving program

 Water saving devices (aerators in toilets and showers). Expected water savings up to 40% annually by end of FY 2022-2023.



Energy saving

 Energy audit started in July 2022 and final results are expected in April 2023.
 The audit will help identify ways to reduce energy consumption.

ACTION PLAN FOR 2022	June	July	August	September	October	November
Installation of press machine	•••••					•
Installation of wood waste chopper						•••••
Energy audit						•••••
Environmental trainings	• • • • • •	•••••	•••••	• • • • • •	• • • • • •	•••••
Waste collection area construction				•••••		

Making mobility safer & More sustainable



DEVELOPING AND MODERNISING THE COUNTRY'S NETWORK

The development of the transportation industry is a priority for Kazakhstan as it is a critical part of the country's economic development plans. KTZ is the major operator of the national railway network in Kazakhstan and is executing the country's strategy through a complete overhaul and renewal of its rolling stock.

Alstom plays an important role in these modernisation efforts, as the producer and supplier of modern and reliable railway equipment including KZ8A freight and KZ4AT passenger electric locomotives and point machines.

The new fleet of electric locomotives improves the capacity of the network by providing reliable traction service. When it comes to passenger operation, the electric locomotive fleet is being renewed with KZ4AT locomotives to haul Talgo trains, offering an alternative to flying between major cities in the country. As a result of these efforts, KTZ has significantly reduced the total lifecycle cost of their equipment. Additionally, Alstom increases railway network coverage by investing in service centres throughout the country, providing maintenance support and major overhauls to ensure a 95% fleet availability rate.

According to a number of indicators, such as average section speed, locomotive power per ton of train, Kazakhstan performs at similar levels of efficiency as railways in other markets such as North America. Nevertheless, the modernisation of the country's network continues and KTZ, in cooperation with Alstom, have access to leading solutions to further increase the productivity of rolling stock and improve energy efficiency and maintenance infrastructure.

A WORD FROM



Batyr Kotyrev

KTZ Chief Engineer



National Company "Kazakhstan Temir Zholy" JSC operates a railway network of more than 15,000 km, and is responsible for freight and passenger traffic. It develops, operates and maintains infrastructure and rolling stock.

Regarding the contribution of Alstom, our long-term partner, to the development of the railway industry, we would like to highlight the improvement of our train service, and a more positive experience for our customers. People increasingly choose rail transport to travel around Kazakhstan.

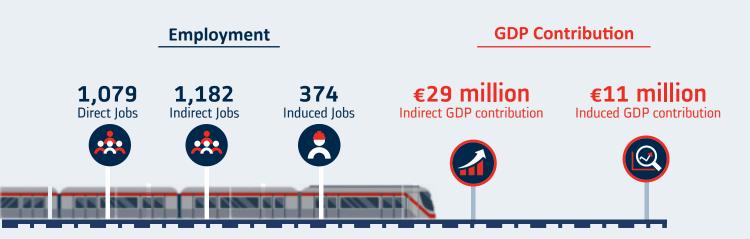
The new locomotives reach the maximum authorized speed of 140 km/h and can cover more than 1,000 km per day. As a result, travel time significantly reduces.

Moreover, it is worth mentioning the quality of Alstom locomotives, which have successfully passed mandatory quality tests. The proven safety and reliability are attractive assets for passenger trust.

Concerning freight transport, an important benefit of KZ8A locomotives is the increased infrastructure capacity. Thus, according to the results of 2021, the "average weight of a freight train" for KZ8A is 24% (974 tons) higher than the same index for old fleet.

In general, the renewal of the locomotive fleet, which we are implementing in partnership with Alstom, is a priority for us, the positive results of which are the uninterrupted transportation process and the improvement of train traffic safety in the country.

Building a local industrial ecosystem



April 2021 - March 2022

In the last year, Alstom activities supported 2,635 jobs and contributed €40 M to the country's GDP

CONTRIBUTING TO THE KAZAKHSTAN ECONOMY

Alstom's commitment to Kazakhstan includes supporting the country's goals of growing its industrial base through knowledge transfer and new production and engineering capability.

Alstom has contributed significantly to employment in Kazakhstan. Alstom's activities in the country supports 2,635 jobs in Kazakhstan through its procurement and wages. In 2021/2022 Alstom bought €32 M worth of goods and services from 342 suppliers in Kazakhstan. This strong relationship with the local industry results in an important socio-economic footprint, as shown in the chart above.



DEVELOPING LOCAL CAPABILITY

Transfer of Technology:

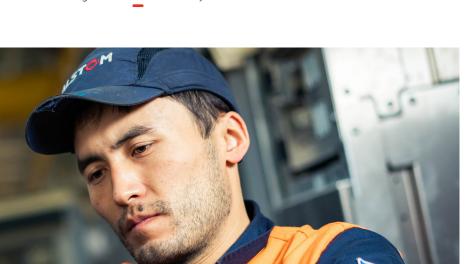
To establish a strong manufacturing base in Kazakhstan and primarily at our EKZ site, Alstom invested €126 M to build rolling stock, components and services know how. EKZ and Alstom manufacturing and subsystems professionals are continuously trained at different Alstom French sites including Belfort, Petit Quevilly, Tarbes, Ornans.

University Partnerships:

Alstom collaborates with the local universities to support the country's future workforce. Partnership agreements have been signed with some of the top national institutions such as Nazarbayev University and Academy of Logistics and Transport.

We support educational institutions in a variety of ways including career guidance, internship programmes and recruitment drives. Alumni of our partner universities successfully work in different sites of Alstom today. Alstom also provided the Academy of Logistics and Transport with KZ8A locomotive components and equipment. The equipment is currently used for training and preparation of future specialists of transport industry.

Building a local industrial ecosystem







Bogie Centre:

In FY 2021-2022, Alstom invested €9.3 M to establish a Bogie Centre with a total area of 7700 sq.m. The workshop covers the full scope of bogie and wheelset (Overhaul/Repair + Production) and created 75 jobs this year.

Onboard transformers:

Alstom created a transformer workshop with a team of more than 70 people in Astana in January 2020.

Today, the workshop capacity is 60 transformers per year for freight locomotives and by the end of 2022 will be manufacturing transformers for passenger locomotives as well.

A WORD FROM



Christian MARTINATI

Managing Director for EKZ



Our development has taken place in three phases. First we developed our capacities in welding, painting and testing processes. Those are the simplest steps to build a locomotive. The second phase saw the development of new skills at EKZ such as transformers assembly and traction blocks. This led to a greater localisation of our products meaning working hand in hand with local suppliers to meet our needs. Such work supports local jobs directly and indirectly because there is a multiplier effect when you develop a local supply base.

Building capability required significant Transfer of Technology from an Alstom base near Rouen in France that that masters design and industrialisation. Finally, the third phase of our development consists in end-to-end integration of the traction system assembly process with an increase in our capacity.

Building a local industrial ecosystem

PARTNERING FOR GROWTH

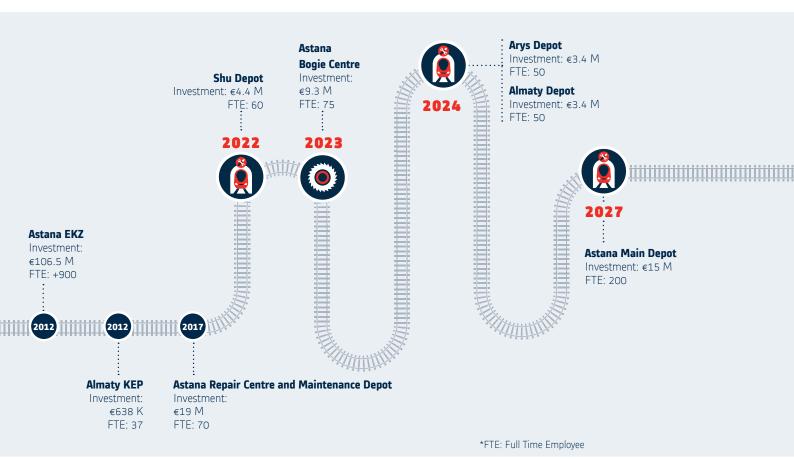
Our work is centred around the development of local capability and know-how. Ten years ago, locomotives assembled in Kazakhstan were dependent almost entirely on imported parts. In fact, only 4% of the locomotive content was produced locally. Alstom invested €126 million to create the needed production capability for critical components such as tractions systems, transformers and bogies. This investment has increased the localisation rate to 31% and the creation of more than 1,000 jobs.

Ongoing expansion of production capabilities will increase localisation rate to 39% by 2025. In addition, Alstom is investing heavily in growing maintenance capability to service 119 passenger locomotives and 250 freight locomotives. Over the next five years (2022-2027) Alstom will invest over €35.5 M to create five new service sites and 435 new jobs as well as provide an additional investment in Rolling Stock manufacturing capability of €11,8 M.



Today, 31% of locomotive content is produced locally compared to 4% in 2012: it is bought or produced locally

ALSTOM INVESTMENT IN KAZAKHSTAN



Growing our people

6,750
HOURS OF TRAINING
IN 2021

675
EMPLOYEES TRAINED
IN 2021

HELPING EMPLOYEES GROW

In our highly competitive sector, recruiting and retaining a talented, diverse global workforce is our top priority. Alstom is committed to helping employees reach their full potential.

Through our People Management Cycle, we require each employee to have an agreed development plan in partnership with their management. This ensures that employee development is prioritised and tracked.

In 2021, the average training hours per employee in Kazakhstan amounted to 10 hours (excluding safety training), and the goal is to increase that to 21 hours per employee by 2025.

Alstom also has a Reward and Recognition programme that launched in 2020 to promote a culture of appreciation.

Employees have access to the internal educational platform with Alstom University allowing employees to participate in a wide variety of programs based on their interests and development plans.

SOME OF THE TALENT PROGRAMS AVAILABLE IN KAZAKHSTAN:

- Alstom Leadership Programme.
- (M3*) MEA Mid-Management programme: A programme with HEC university.
- The Talent Groups: A programme for top talents from around the world to get special assignments, networking and collaboration opportunities.
- 4 IPMA: Project Management Certification.
- 5 Finance Projects and Tenders Management certification to develop business financial skills and competencies.
- Lean Six Sigma programmes.
- Mentoring/Coaching.

A WORD FROM



Olzhas AKHMETOV

Managing Director Services, Western & Central Asia

I joined Alstom in 2012 and have held five different positions to date. We grew from 10 to over 1,000 employees today because Alstom is committed to building strong local teams and developing key competencies. I have participated in several trainings for both soft and hard skills.

Additionally, I took part in the Alstom Leadership Program which is a one-year program gathering leading managers from all over the world. Through formal training, coaching and hands-on projects, we learned a lot from each other, from the various cultures and ways of working, and strong relationships have been created.





ALSTOM IMPACT IN KAZAKHSTANGrowing our people







CREATING A DIVERSE AND INCLUSIVE ENVIRONMENT

As part of our localisation efforts, Alstom is proud of the fact that the majority of its employees are local hires. The current workforce comprises of 8 different nationalities, and we are committed to more proactively embedding diversity and inclusion into all that we do.

Women's participation in the workforce is a priority for Alstom. As of June 2022, Women represented 19% of the employee base in Kazakhstan and we have committed to reaching 28% of women in management & engineering roles by 2025. We are proud of the progress already achieved at our management committee where ratio of women is 28.5% which is already equal to our target.





Growing our people

PROVIDING A SAFE WORK ENVIRONMENT

At Alstom, the health and safety of our employees is our highest priority. Alstom has established concrete measures to provide a safe working environment for everyone. This Environment, Health and Safety (EHS) policy is implemented through extensive training for all employees and management, as well as a zero-tolerance approach regarding safety violations. Following these guidelines, last year all Kazakhstan sites reported zero severe accident.

Trainings & Processes:

Alstom conducts both online and onsite safety training programmes that address general and specialised safety concerns. A specific training course has been developed and mandated for all employees at construction sites to better comprehend all of the risks associated with working in the complex railway environment. Alstom conducts accident investigation training to reinforce its ability to identify the root cause of accidents. Safety inspections are conducted regularly on weekly and monthly basis, to help managers build management practices that ensure a strong safety culture.

SAFETY TARGETS AT HORIZON 2025



Severe accident

A lost time Injury Frequency Rate (IFR1)

0.7

A total recordable Injury Frequency Rate (IFR2)

2.0

100%

of Kazakhstan locations certified to the ISO 45001 Occupational Health and Safety management norm

EKZ 2021 PERFORMANCE



Severe accidentLost time accident

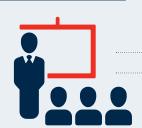


IFR1 of 0.8

363 EHS

employee induction

740 High Risk Assessment trainings



712 Industrial Safety trainings

446 Labour Safety trainings





Community engagement



2,750
TOTAL BENEFICIARIES
SINCE 2018

€250,820
IN TOTAL SUPPORT
(2018 -2021)

EMPLOYEE VOLUNTEERING

Despite the pandemic, our employees continued to find opportunities to give back and dedicated their time to supporting a wide range of social and environmental initiatives. This included donating equipment to schools, planting trees or supporting vulnerable members of the community through events and personal donations.

158
VOLUNTEER
HOURS SINCE
2020

Some of our recent initiatives:

NATURE PROTECTION

- 160 trees, plants and flowers were planted around the EKZ site by 40 Alstom volunteers, improving biodiversity and creating green recreational spaces in the area.
- 15 containers for separate waste collection had been donated to a start-up project introducing green skills and habits among school children.

EDUCATION

Alstom donated 45 computers to low-income families to support children's online education during pandemic time.

DONATIONS

Alstom employees regularly support support local communities with donations such as clothes, food and other necessities especially during the holidays such as Nauryz and Qurban Eid.

Moreover, support is provided to veterans in the form of medicine, food items and help with the refurbishment of their homes.

Donation bins for collecting clothes and shoes are installed in three sites in Astana.

Community engagement

ALSTOM FOUNDATION

Established in November 2007, the Alstom Foundation aims at supporting initiatives that improve the living conditions and economic possibilities of communities around Alstom's facilities. Alstom employees collaborate with local or international Nonprofit organisations who have a track record of successfully implementing initiatives on the ground. We focus on:



Economic and social development



Access to mobility



OF ALSTOM FOUNDATION'S TOTAL BUDGET IN 2018-2021 ALLOCATED TO **KAZAKHSTAN**





Access to energy and water

FOUNDATION PROJECTS

The Mentorship Program of DARA NGO helps orphans and children deprived of parental care to discover their life potential and develop critical skills to help them become independent. The project aims to solve these problems, by providing teenagers in orphanages emotional support and assistance in acquiring social skills by recruiting mentors and organising mentorship program.

The programme is implemented by DARA according to its own specific methodology to search and select mentors. DARA has established a mentor training program and a resource book to ensure mentors are well prepared and able to make an impact. With the support of Alstom, the project had been launched in three new cities of Kazakhstan. As a result, to date, 140 pairs of mentors and mentees have been matched and working diligently together over two years, including 24 pairs created since Alstom supported the project.



A WORD FROM



Ayna TULEBAYEVA MENTOR AT DARA NGO



In the beginning, my 14-year-old mentee Diana was very shy. Now, it has been 7 months since the mentorship has started and Diana has become more open, and confident. I feel so satisfied to see her improvements!

The Alstom Foundation's funding is essential to employ professional psychologists to train and support both Mentors and children throughout the whole program. I think many children could benefit from this wonderful initiative that deserves to be expanded.

Future Outlook

The role of Alstom is not only to provide rolling stock, services and maintenance but to offer mobility solutions to a world in profound transformation. As you saw in the report, our work goes beyond addressing the immediate transportation needs of the country but rather to support our customers as they build a strong and sustainable rail industry. We see a growing future in Kazakhstan, one with increased localisation to at least 39% by 2025, a larger and diverse employee base (28% women in management/engineering) and new export opportunities. We remain committed to being a major contributor to the revitalisation of the country's rail industry and the development of its economy.





28%
WOMEN IN
MANAGEMENT/
ENGINEERING



5 NEW MAINTENANCE SITES





Alstom

10th floor, Samal 12, Astana, 010000, Republic of Kazakhstan

For more information, please visit

www.alstom.com

