



APAC INVESTORS PRESENTATION

Ling FANG, APAC President

December 4th, 2024

Ling Fang – Latest positions



2018 - Present : President Asia-Pacific Region

2015 - 2018 : Managing Director China and East Asia

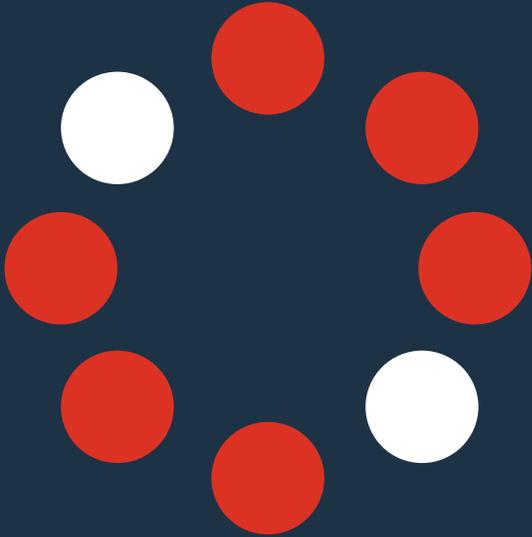
2010 - 2015 : Managing Director China

2009 - 2010 : VP Market Development & Strategy Asia-Pacific

2003 - 2009 : VP Finance Asia-Pacific

Joined Alstom in 1995

Agenda



1. Executive Summary
2. Alstom in APAC
 - 2.1 Presence and Performance
 - 2.2 Highlights from India
3. APAC Contributions to the Group
4. Focus on China
5. Key takeaways

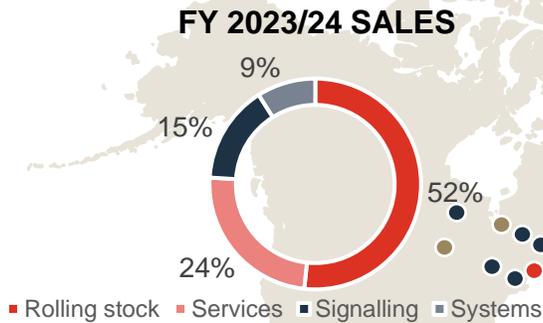
1

Executive Summary

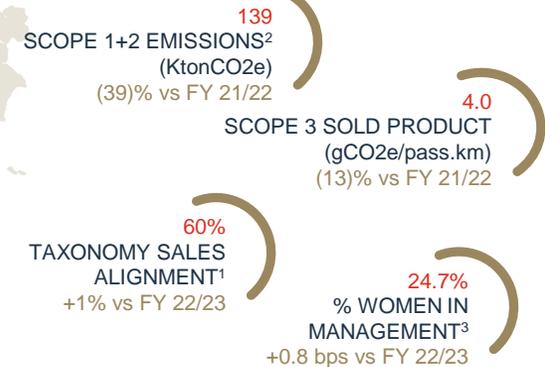
Alstom's investment case

A WORLDWIDE LEADER WITH STRONG MARKET SHARES

Rolling stock: #1
 Services: #1
 Signaling: #2
 Turnkey: #1



A RECOGNIZED CSR CHAMPION



AN AMBITIOUS STRATEGIC PLAN: AiM 2025

Leading the way to greener and smarter mobility, worldwide



Driven by **One Alstom team**, Agile, Inclusive and Responsible

Mid- to long-term ambitions

- Book to bill **above 1**
- Sales average growth **~5% / year**
- aEBIT margin within **8-10% range**
- FCF conversion trending to **100%* over the cycle**

* Of adjusted net profit

LEADING THE INNOVATION RACE

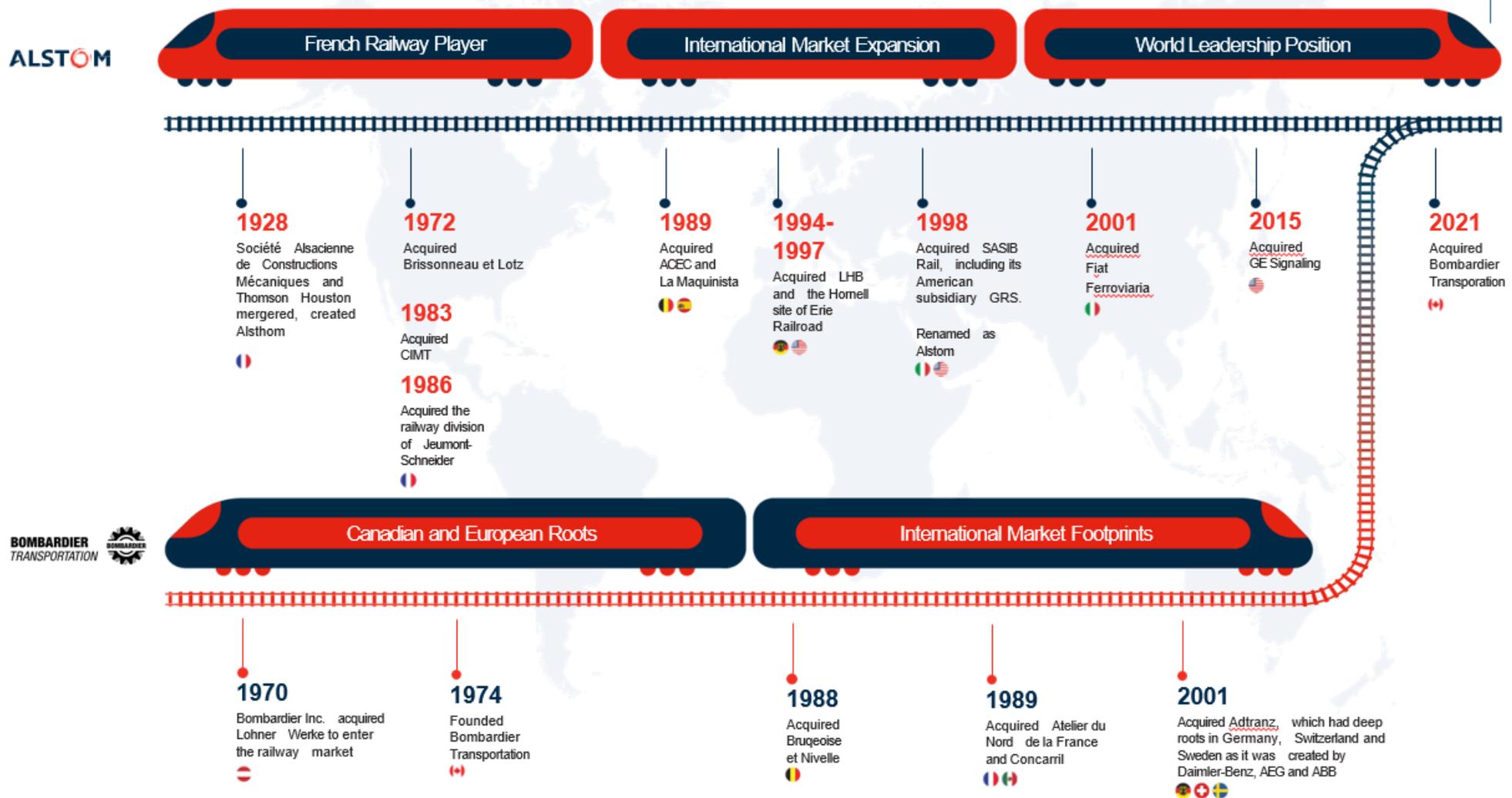
- HYDROGEN
- AUTONOMOUS MOBILITY
- ENERGY EFFICIENCY
- DIGITAL SIGNALLING
- PREDICTIVE MAINTENANCE



1. Figures unaudited
 2. Environmental figures are reported on a calendar year basis: FY 2023/24 corresponds to 2023 calendar year. Based on last 12 Rolling Months.
 3. Women in management and professional positions

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Alstom's story: building the world's leader in rail technology



2

Alstom in APAC

2.1

Alstom's presence and performance in APAC

APAC – Identity card

- **Alstom in APAC:**

- **5** Clusters with local presence in **12** Countries
- **17 600+** Employees⁽¹⁾
- **13,3 Bn€** Order backlog with **2,4 Bn€** annual Sales⁽²⁾
- **#1** provider of Sustainable rail mobility⁽³⁾

- **Our Footprint:**

- **13** Manufacturing Sites
(out of which 5 Assembly Sites)
- Global Engineering Centres in **India & Thailand**
- Project offices & Services depots across the region

- **APAC set-up contributing to Alstom growth worldwide**

(1) as of MAR24
 (2) MAR24 Actuals
 (3) in APAC accessible markets, excluding CRRC on its domestic market



Each cluster contributes uniquely forming a robust consolidated APAC region

India



- Major **delivery centre** for APAC and other Regions
- A growing **talent pool** for Alstom

East Asia



and others...

- **Profitability driver** with robust market diversity
- **Alternative Best Cost Country** outside India for Signaling / Systems Engineering

Singapore & Malaysia



- Enabler for **collaborative innovation**
- **Key reference** for region



China



- **EBIT and Cash Driver** for the region (mostly through JVs and partnerships)
- Strategic **partner** for specific segments (Monorail/People Mover, Tramway traction, High Speed...)

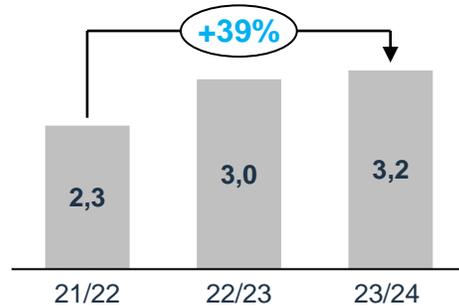
Australia & New Zealand



- **Market share and profitability driver**
- Likely regional leader in rail **decarbonization**

Strong financial performance delivered by a highly engaged team

Order Intake [Bn€]



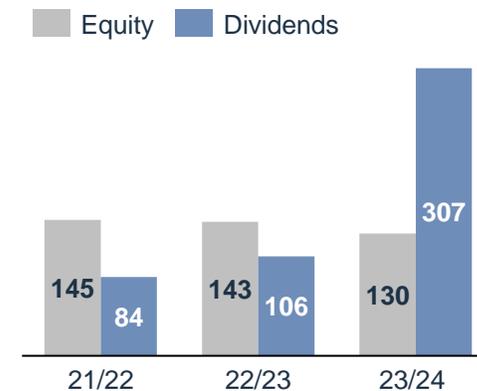
Sales [Bn€]



Backlog [Bn€]



Equity Pickup & Dividends from China JVs [m€]

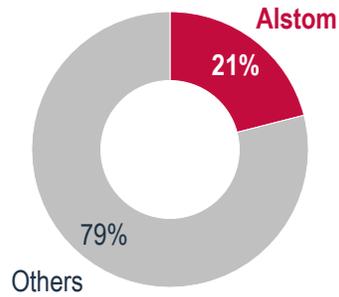


Alstom - the market leader in Asia Pacific

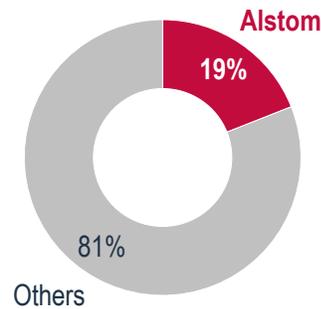
Market Share by Product Line (excl. China) based on Order Intake

Accessible Market, FY21-24 (3Y)

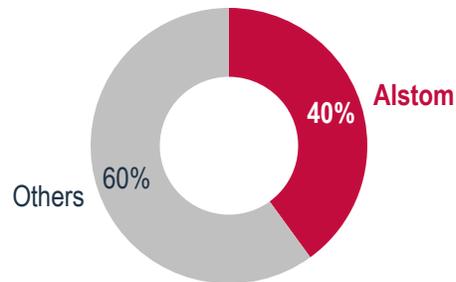
Rolling Stock #1



Services #3

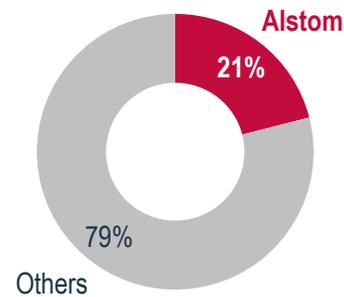


Signalling #1



INFRA not included (not addressed since 21/22)

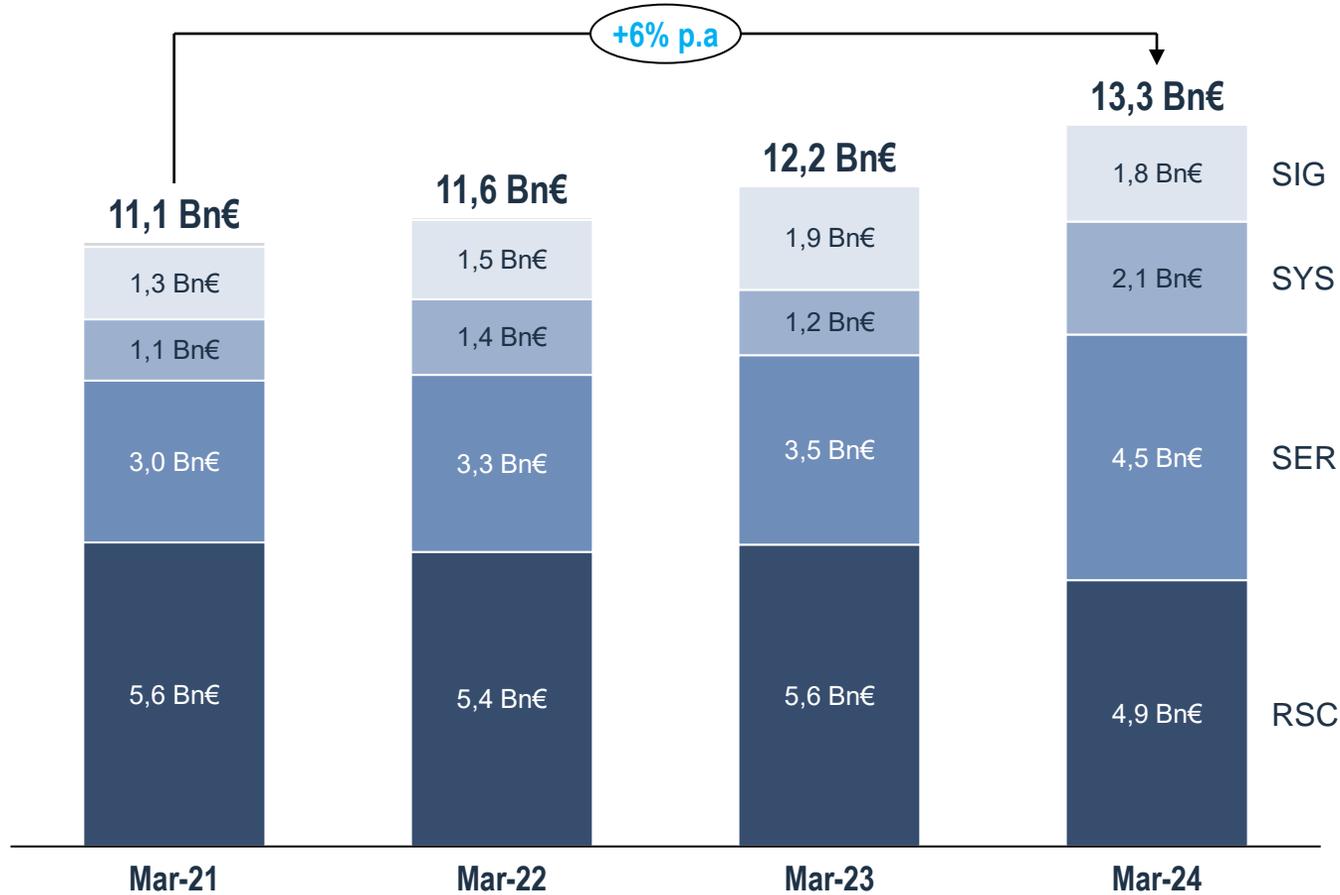
Systems #1



- **Rolling Stock Leadership:** Driven by key projects in Australia (e.g., Melbourne Tram) and India (e.g. Delhi Metro Phase 4)
- **Largest Standalone Service Contract:** Secured the largest standalone services order in Australia – VLine DMU 10 Year Maintenance, valued at over €900m
- **Signalling Leadership :** Major contracts in East Asia, including HK Lantau Extension (>€400m). Additional successes across APAC – e.g. in India, Australia, Singapore, and New Zealand
- **Systems Leadership :** Continued success across East Asia, notably in the Philippines (North-South Commuter Railway) and Taiwan (Taipei Circle Line Ph 2)

Customers' trust driving a healthy backlog growth

Alstom APAC backlog by Product Line [EUR bn]



Year on year increase of the GM% on Backlog

- Positive evolution on the composition of our backlog towards **higher-margin SER business** yielding **GM% improvement** alongside **steady backlog volume growth** over recent years
- Jump in **SYS** backlog in 2024 driven by the successful capture of Philippines NSCR at ~1bn€ cementing our status as **the systems leader in the region**

Some recent Projects under execution

-  Rolling Stock
-  Services
-  Signaling
-  System

India   



Delhi-Meerut RRTS
Supply 30 RRTS trainsets & 10 MRTS trainsets with 15 yrs maintenance + 82km Signalling + Telecom

India  



E-loco for IR
Supply 800 double section freight electric locomotives with associated long-term maintenance

Australia  



Next Generation Trams – Melbourne
100 Flexity low-floor Next Generation Trams (NGTs) + 15-year maintenance

Australia 



Perth High Capacity Signalling
Deliver and maintain World's largest signalling project by route length

Singapore 



North South and East West Lines – Fleet Replacement
Deliver 106 six-car Movia metro

Taiwan 



Taipei Circle Line phase 2
Alstom-led consortium to deliver an innovative integrated system for Taipei's fully automated metro line

Philippines 



North-South Commuter Railway (NSCR) Extension Project
Southeast Asia's first mainline signalling system to be deployed with ETCS level 2 technology

China *  



Metro – China
More than 23 000 metro cars traction delivered, and 100+ metro lines equipped with CBTC solution

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* Through JVs (Alstom has a unique presence in the Chinese market)

Pioneering technological breakthrough across the Region



2.2

Highlights from India

Alstom's unique presence in India

The most **localized** railway multinational company in India



12,100
Employees



845 m€
Sales



3.6 Bn€
Backlog

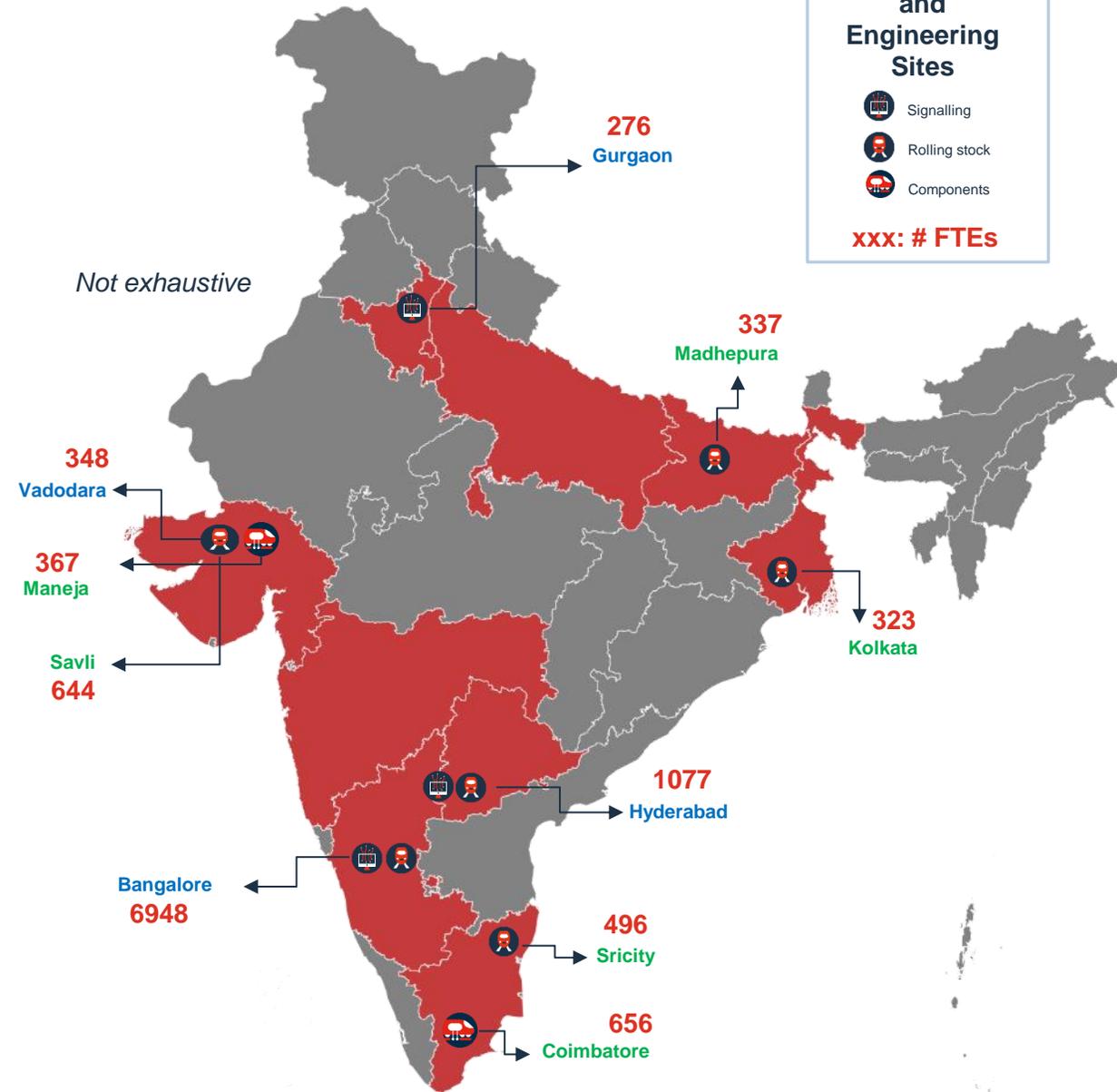


6 Industrial Sites
out of which 3 Assembly Sites



Engineering Centres
for Rolling Stock and Signalling

as of MAR24



Leadership in Urban segment supported by our significant local footprint

Zoom on **Urban / Metro** segment



Rolling Stock

~2 out of 5 cars
running supplied by Alstom



Signalling

>50% route length
in operation equipped with
Alstom signalling



Fully autonomous in addressing
Rolling Stock and Signaling needs within India

India's URBAN rail market

Network overview

- 15 cities with metro lines (~900km operational and further ~600km under construction)
- 5 cities with first new lines **under construction** (~150km)
- 19 additional cities **planned** for future Metros networks (~600km)
- >20 Metro rail operators across the country

Market potential

- Metro projects may face political and financing challenges, limiting new awards to only 2 - 3 projects annually
- However, **rapid urbanization** and **large population** indicate a **significant latent demand** for Metro solutions over the longer term

Alstom is well positioned to address a growing Mainline market

Zoom on **Mainline / Locomotives** segment



Ability to deliver full **eLocos**...



Alstom is the first rail multinational company capable of delivering both **made-in-India** full electric **Locomotives** and **propulsion components** to address Indian Railways' unique business model



...and state-of-art **Components**



India's MAINLINE rail market

Network overview

- **68,000 km track network** – significant progress towards full electrification (currently at 90%+)
- **Suburban** networks in major cities – notably **RRTS** corridors in Delhi. *Currently operational from Sahibabad to Meerut.*
- **1 High Speed** line under construction (Mumbai – Ahmedabad)

Market potential

- Mainline market poised for growth in coming years, supported by **major investment programmes / political targets**
 - > **Freight:** Modal shift from Road to Rail – moving from **26%** in 2021 **to 45%** by 2030
 - > **Passenger:** traffic to be **increased by +50%** between 2021 and 2030 (from 8Bn to 12Bn passengers)

Source: 2030 National Rail Plan

03

APAC contribution to the Group

Adding value to Alstom Group beyond APAC

Powering
Global Engineering

~ **33%**
of the Group

APAC contributes to
approximately 1/3 of
all **rolling stock** and **signalling**
engineering hours
in Alstom Group

as of MAR24

Export References with contribution from India



AMECA
Metro: Riyadh, Dubai



Americas
Metro/Commuter: REM, Trenmaya



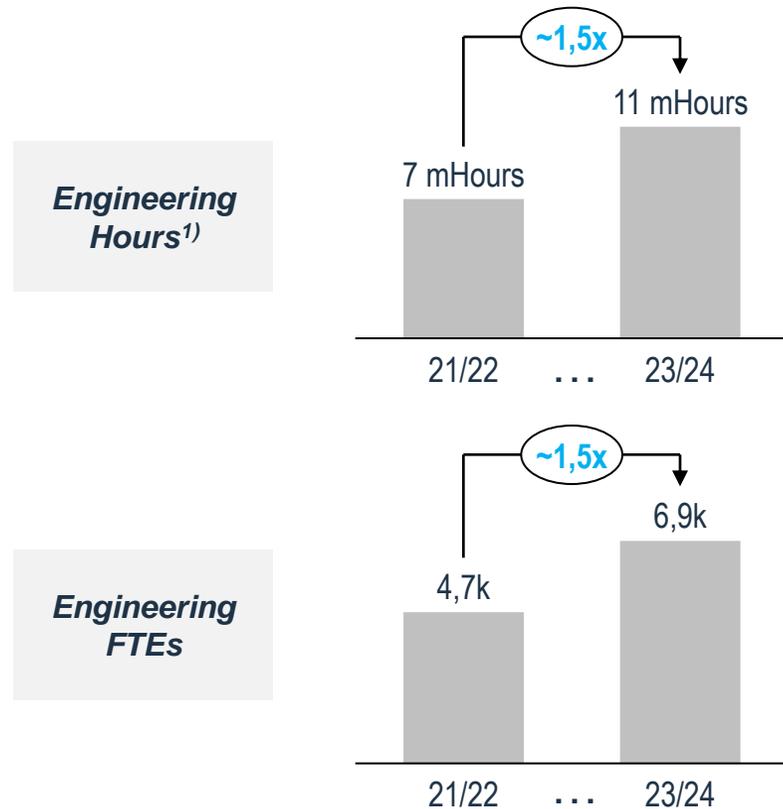
Europe
Regional: ICNG



France
HST: TGV

A global reach made possible by Engineering growth in India and Thailand

CAPACITY increase



CAPABILITIES increase



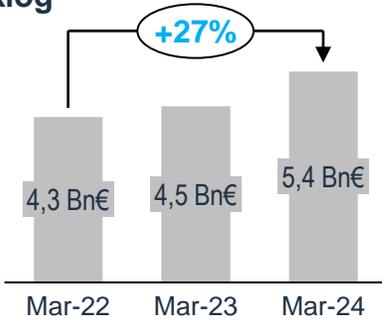
- > Transitioned from Participating Unit to **Leading Unit**
- > **Diversification** to support all our Products Lines: Signaling, Rolling Stock, Systems, Services
- > Development of **New Products** – Suburban & APM, ETCS
- > **Increasing autonomy**: Adequately addressing needs from APAC within APAC

1) Includes Rolling Stock and Signalling Engineering in-house hours from our Global Delivery Centres in APAC

Growth illustrated with our Australian success story

Evolution of ANZ key figures

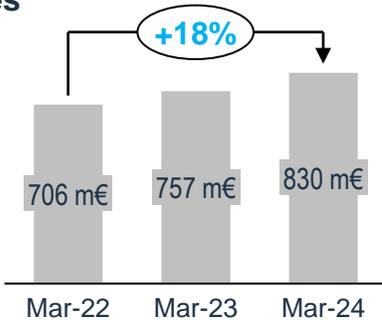
Backlog



FTE



Sales



Orders



2002
operational
X'trapolis 1.0 –
made in Europe

X'trapolis 2.0 –
made in APAC
2025
1st delivery

Sept 2021

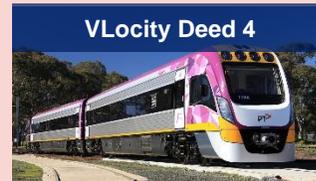
June 2022

July 2023

Dec 2023

July 2024

**Key
orders
secured**



04

Alstom in China

A unique presence in China thanks to 11 JVs

11 JVs (3 consolidated / 8 non-consolidated)

Delivering products & solutions covering **all businesses**

- 4 Rolling Stock JVs
- 4 Compo JVs + 1 Compo WOFE ¹
- 2 Signalling JVs
- 1 Services JV
- ~10,000 Employees ²

Significant **Financials** ³

- € 2.3 Bn Sales (incl. non-conso JVs)
- ~€ 5 Bn Backlog (incl. non-conso JVs)
- € 130 Mn Equity Pickup

Serving both **domestic market** & customers **worldwide**



1. WOFE: Wholly-Owned Foreign Enterprise

2. Including WOFE, consolidated sites and non-consolidated JVs.

3. FY23/24 Total China Actual, with 100% OI/Sales/Backlog of non-consolidated JVs included.

05

Key takeaways

Key Takeaways



MAIN ACHIEVEMENTS

- Successful **integration** of Bombardier Transportation with **high level of engagement and positive spirit** across teams
- Sustained excellent financial performance
- **Continuous improvement** on projects and sites stabilization
- **Successful recruitment** ramp-up despite external market challenges

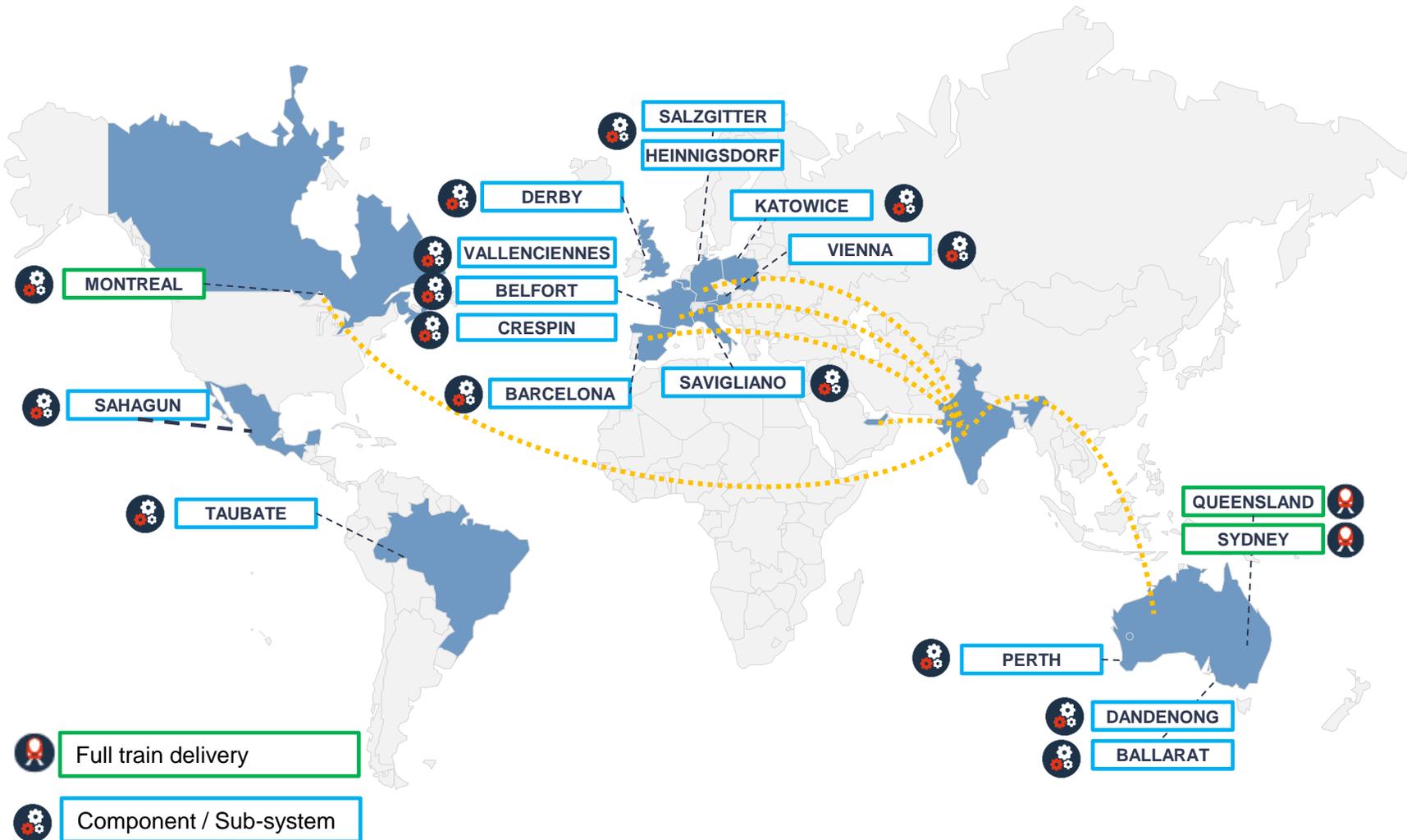


PRIORITIES MOVING FORWARD

- **Maintain market leadership** without engaging in **price war** with competition
- **Sustain profitability and cash performance** in light of new project challenges
- Further improve our **Operational performance**
- Grow level of **local expertise and competencies** to enhance overall APAC capabilities

APAC to open a new chapter of development and success

Supplying the world with Rolling Stock & Components from India



Global outreach

- Supporting **20+ Alstom Global sites**

Components delivered from India

- Coimbatore** – Traction, looms, cubicles, power modules, etc.
- Savli & Sri City** – Car body, Flat packs, Bogie frames and assembly
- Maneja** – Traction sub-assembly



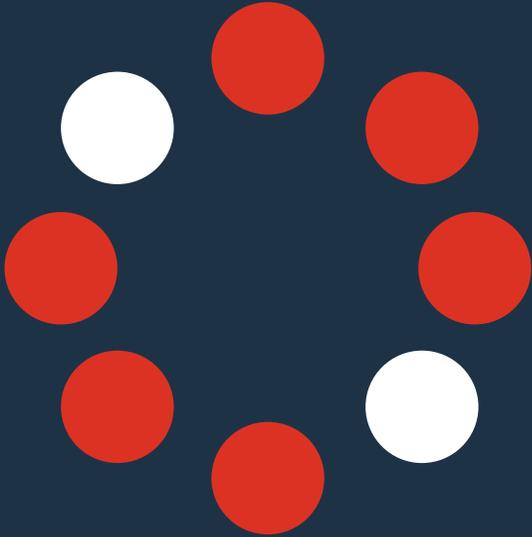
INVESTORS' VISIT TO ALSTOM INDIA : SRICITY

Olivier LOISON

4 December 20204

ALSTOM
• mobility by nature •

Agenda



1. Alstom in India

1.1 Overview

1.2 Making in India for India

1.2 Making in India for the World

2. Alstom Sri City

2.1 Key highlights

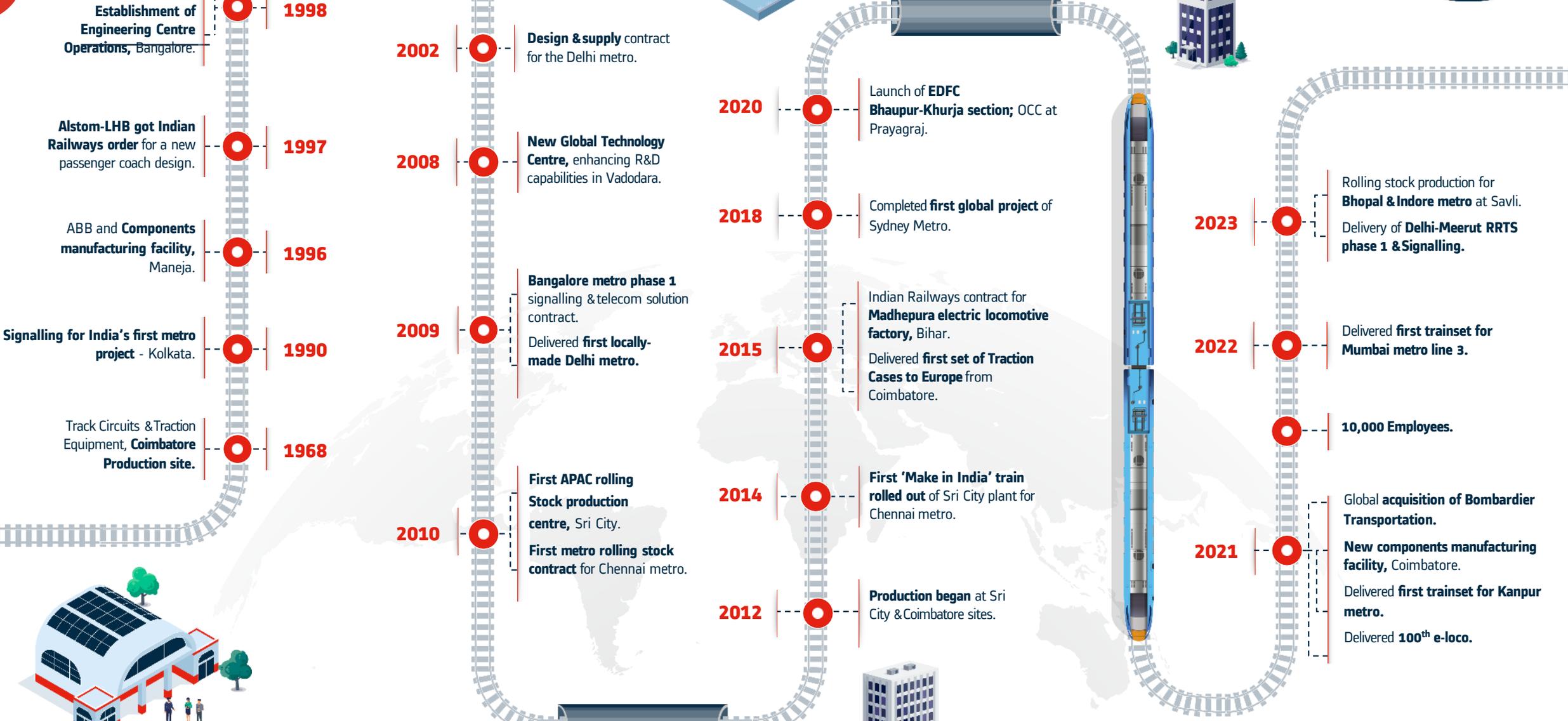
2.2 Project Portfolios

2.3 Operational KPIs

01

Alstom in India

Merger of Railway Products India Limited & Alstom.



1998 Establishment of Engineering Centre Operations, Bangalore.

2002 Design & supply contract for the Delhi metro.

1997 Alstom-LHB got Indian Railways order for a new passenger coach design.

2008 New Global Technology Centre, enhancing R&D capabilities in Vadodara.

1996 ABB and Components manufacturing facility, Maneja.

2020 Launch of **EDFC Bhaupur-Khurja section**; OCC at Prayagraj.

2023 Rolling stock production for **Bhopal & Indore metro** at Savli. Delivery of **Delhi-Meerut RRTS phase 1 & Signalling**.

1990 Signalling for India's first metro project - Kolkata.

2009 Bangalore metro phase 1 signalling & telecom solution contract. Delivered **first locally-made Delhi metro**.

2018 Completed **first global project** of Sydney Metro.

1968 Track Circuits & Traction Equipment, **Coimbatore Production site**.

2015 Indian Railways contract for **Madhepura electric locomotive factory**, Bihar. Delivered **first set of Traction Cases to Europe** from Coimbatore.

2022 Delivered **first trainset for Mumbai metro line 3**.

2010 **First APAC rolling Stock production centre**, Sri City. **First metro rolling stock contract** for Chennai metro.

2014 **First 'Make in India' train rolled out** of Sri City plant for Chennai metro.

10,000 Employees.



2012 **Production began** at Sri City & Coimbatore sites.

2021 **Global acquisition of Bombardier Transportation.** **New components manufacturing facility, Coimbatore.** Delivered **first trainset for Kanpur metro.** Delivered **100th e-loco.**

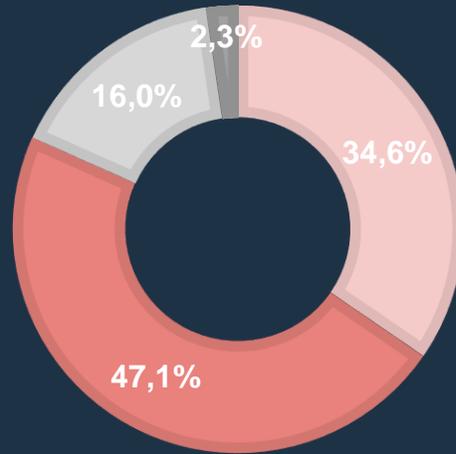


12,100

Employees by end of Mar'24



12 Different Nationalities



AGE DISTRIBUTION

■ Less than 29 ■ 30-39 ■ 40-49 ■ More than 50

Average Tenure

3.6

years

Gender Diversity



78.4%

Male



21.6%

Female



0.02%

Unidentified

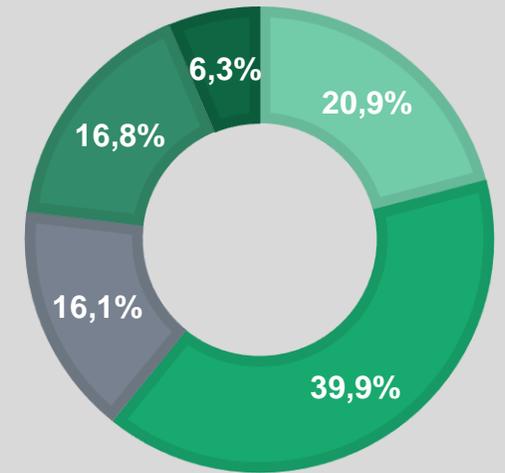
Female MEP – 21.5%

Female Others – 21.6%

Average age

32.9

years



TENURE DISTRIBUTION

■ <1 ■ 1-3 ■ 3-5 ■ 5-10 ■ >10

Headcount as of 30th Apr'24 including MEP/Temp, Apprentice & Hired Staff [Source: Census data](#)

Sustainability at core of our business



Decarbonising our operations

Resource conservation through

- Circular economy (7% on-site)
- Recovered and recycled waste
- Solar installations in Sri City, Coimbatore and Mumbai

22% reduction in Scope 1 emissions (from Dec 2022)



Communities

10% of Global Foundation project funding coming to India (FY 2023-24)

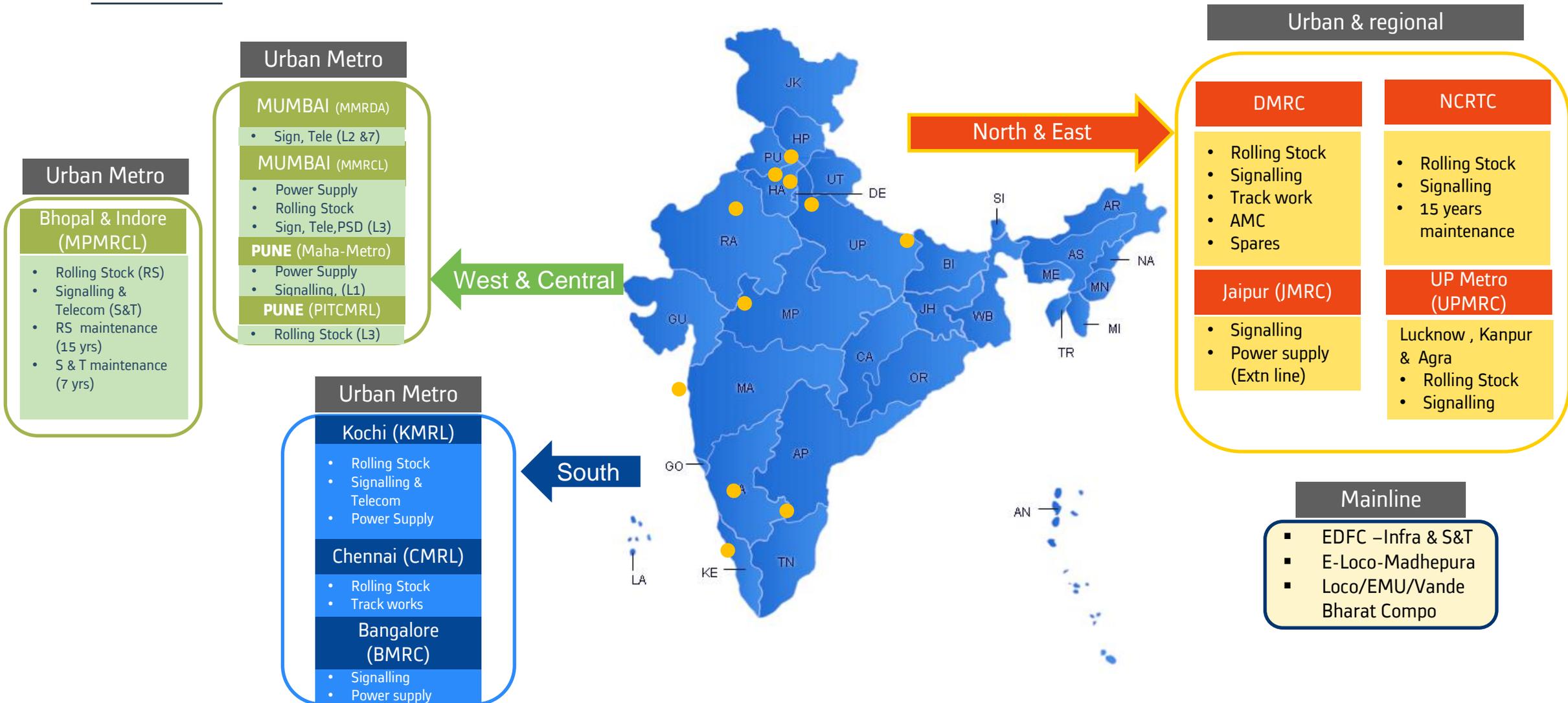
Approx. 1 million euros of local spending for CSR (FY 2023-24)

Close to 70,000 total beneficiaries from Alstom community investments across Sustainable Mobility, Education, Healthcare and Environment

1.1

Making in India for India

India for India – Major Projects



India home to Alstom's largest Digital Experience Centre for Signalling

Zoom on **Signaling Engineering**



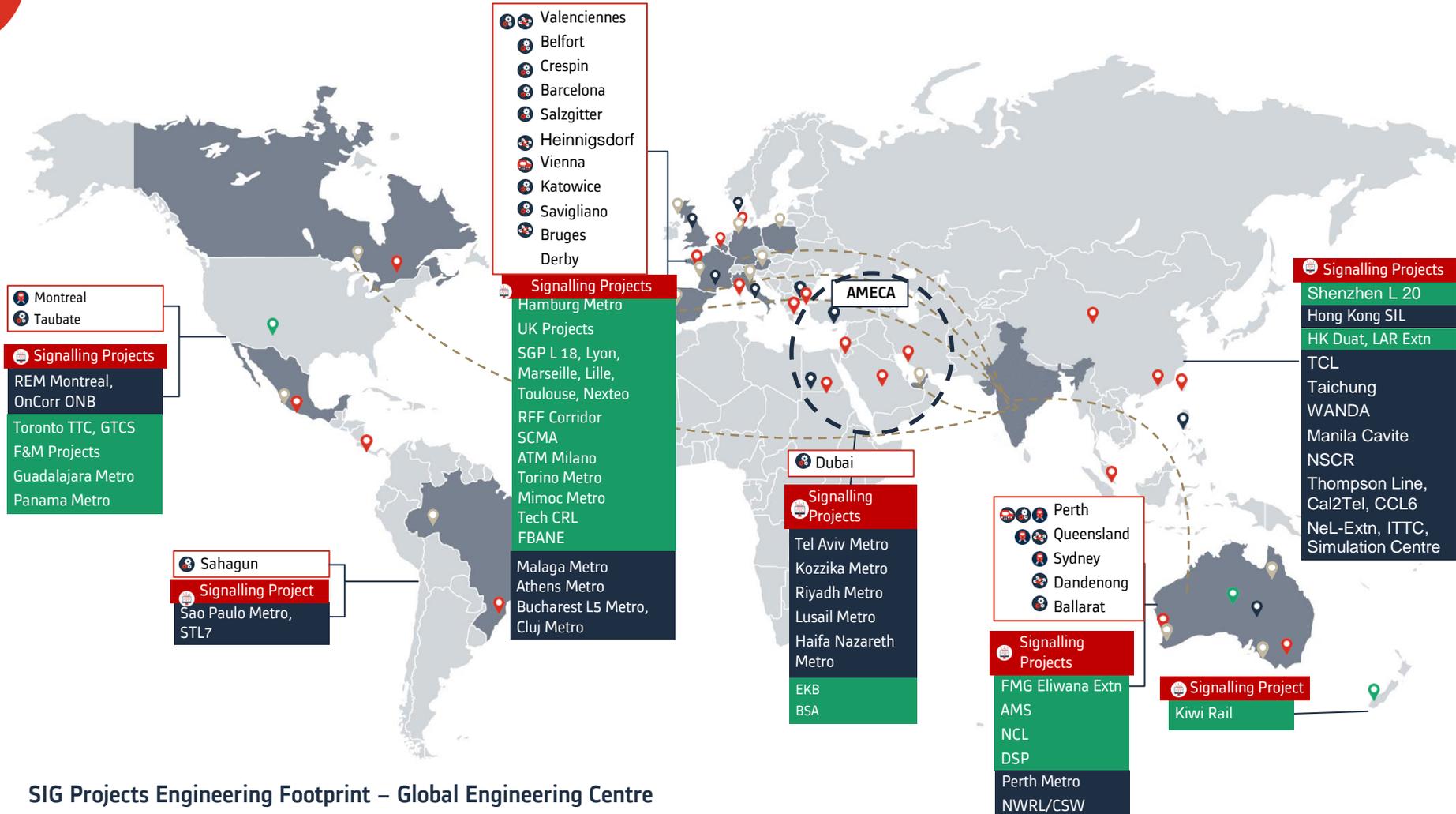
India's first
Digital Experience Centre
by a Rail OEM

- Total investment of **€40 million**
- Spread over **60,000 square feet**
- Projected to support more **than 7 million hours** of engineering work for Indian and global projects

1.2

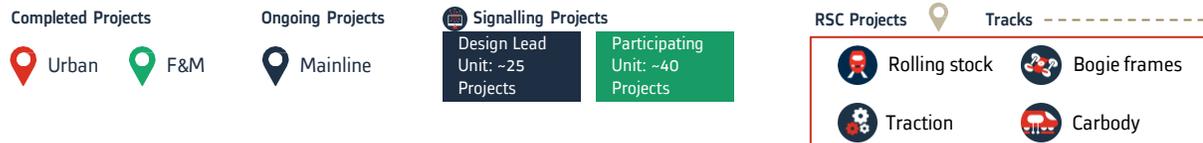
Making in India for the world

India to the World



SIG Projects Engineering Footprint – Global Engineering Centre

85 Projects, Design Owner 45 Projects, End Customers in 21 Countries



RSC

- Collaboration with 21 Alstom Global sites
- 100+ people supporting 40 Global projects
- **Coimbatore** – Traction, looms, cubicles, power modules, etc. to more than 15+ projects
- **Savli & Sri City** – Car body, Flat packs, Bogie frames and assembly for 5+ projects
- **Maneja** – Traction sub-assembly for 3 projects

D&IS

- 3000+ engineers for 14 different engineering sites and 21 countries.
- 400+ certified world class expert with 2 master experts
- Leading design for 25 international projects and supporting 40 projects as a participant.

Shared Services

India is the hub for the

- Global Finance Center (GFC), Procurement Global Shared Services (GSS), Human Resources Operations (HRO) APAC hub and Supply Chain Solutions Centre (SC2)
- Workforce of more than 480+ people in this domain.

02

Alstom SRICITY

An overview

SRICITY – Site ID Card

Site scope

Lead Industrial Site for Manufacturing, Testing & Commissioning of Metro Trains

Competences

Carbon Steel	
Stainless Steel	✓
CBS	✓
Painting	
Pre-fitting (Modules)	✓
Fitting	✓
Testing	✓
Homologation LRV	

Split of activities

	%	S&OP Q4
Total WL-FIRM (Khrs)	100	470 Khrs
CBS	43%	204 Khrs
Fitting	48%	225 Khrs
Bogie	03%	13 Khrs
Testing	06%	29 Khrs

Workload / FY2425

Key figures

As of Apr, '24

Total FTEs (Perm + Temps) – incl. inactives

Manuf. FTEs (Perm)	157
Manuf. FTEs (Temps)	99
Other FTEs (Perm)	26
MEP's	185

Surface (sq.m) – Total Land

Built up manufacturing area	58636 Sq.m
Office area (admin/ trainings)	3365 Sq.m
Roads open tracks parking & Landscape/jungle	152486 Sq.m

Fixed Assets (€ M, o.w. Real Estate) 60.7 M€ Gross

CBS capacity (cars / month) 44

Fitting capacity flowlines 44

Static testing capacity (# tracks, length) 04 TT ; 140 m
02 TT ; 205m

Dynamic testing track 950 m

Main projects in ToT (as a Donor Site)

	Receiver	Status
Car Level Test Bench & Test Procedure	Ballarat	ongoing

Current layout & Product portfolio



- Car body Shell
- Bogie
- Retro fitment
- Fitting
- Testing
- New Retro shop

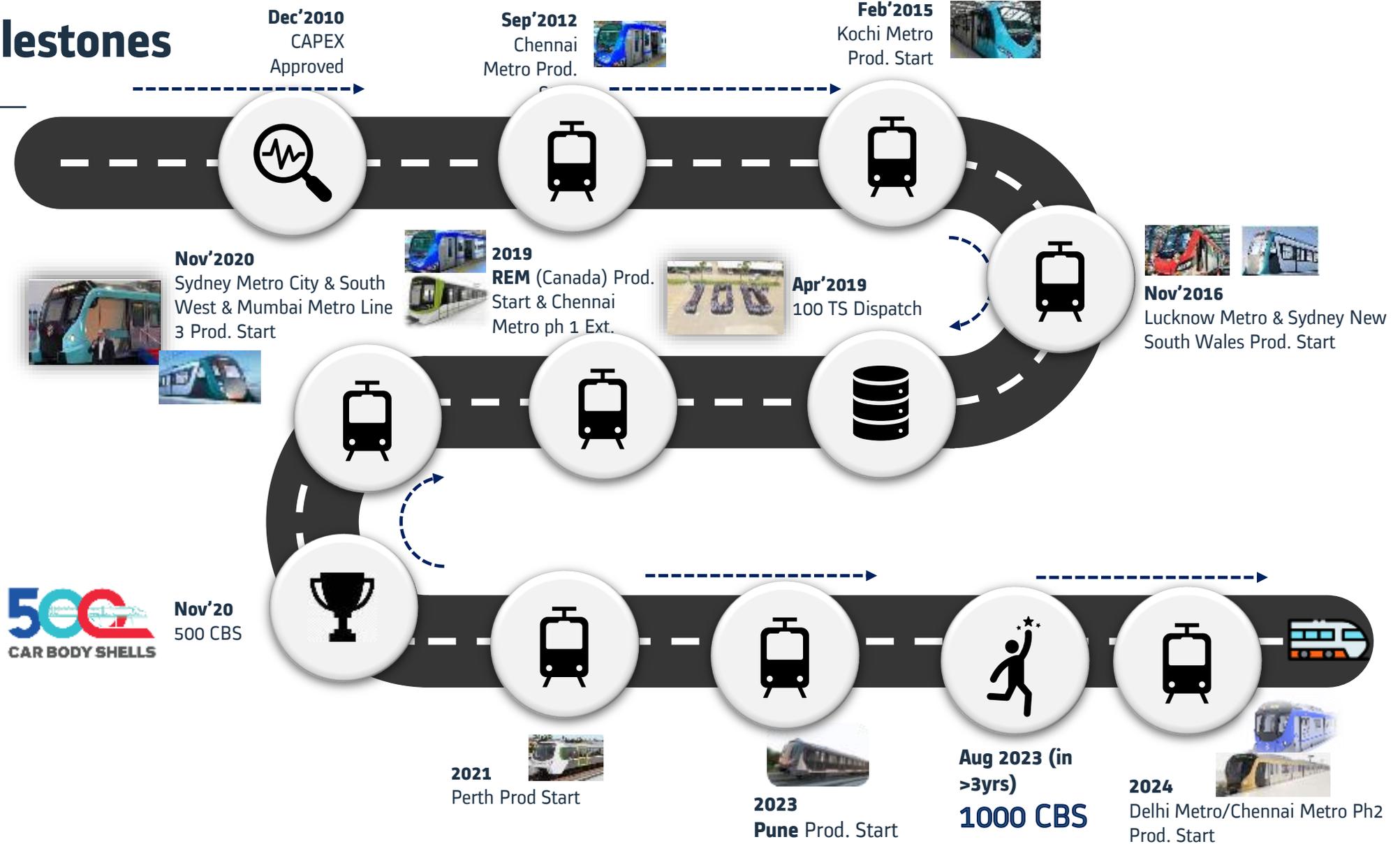
Product portfolio's:

- Metropolis Stainless Steel (Conventional)
- SMART Metropolis Stainless Steel

Highlights on Industrial Competencies

- > Welding (Special processes)
- > Torquing & Reverting (Special processes)
- > Bonding (Special processes)
- > Crimping (Special processes)

Key Milestones



CBS – Car Body Shell
TS – Train Set
Prod. - Production



Our strengths: Special Process Controls

WELDING



- Stage VT for Arc & Spot Welding.
- Stagewise Liquid Penetration Test for Arc Welding
- Daily Shear test for Spot Welding
- Welder Qualification reassessed every 6 months

TORQUING



- First mounting Review for torquing
- Weekly stagewise workstation inspection audit
- Product-level Layered Audit
- Monthly Skill Management-Installation wise qualification
- Requalification and Revalidation of people

BONDING



- Temperature and RH Control at Manufacturing Facility
- Degreasing process control for all the installations
- Bonding procedure qualification record and on job qualification record controls of manufacturing

RIVETING



- Weekly stagewise workstation inspection audit
- Product-level Layered Audit
- First mounting Review for riveting
- Requalification and Revalidation of people
- Machine controlled Calibration

CRIMPING



- Initial design review for crimping as well as cabling
- Process audit at workstation based on schedule
- People requalification for every 2 year
- First mounting Review for crimping

STANDARD

**Welding Certification
EN 15085-2**

03 Experts

04 Certified Inspectors

STANDARD

**Alstom Std
DTRF 150214**

01 Expert

STANDARD

**Alstom Std
DTRF 150620**

01 Expert

STANDARD

**Alstom Std
DTRF 150619**

01 Expert

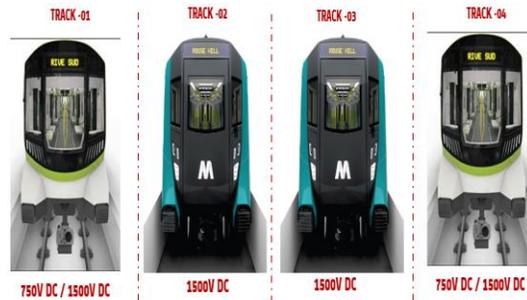
STANDARD

**EN 50343
EN 60352**

01 Expert

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Testing Facility



Test Shop 1

- 157 m length | 6 car configuration on each track.
- Capacity of 1500V DC | 25KV AC supply for all 4 tracks.
- Track-1 and Track-4 having 750V DC supply through shore supply.
- Master HV LOTO Station with HV power supply through dedicated workshop plug and / or catenary.



Test Shop 2

- 200 m length | 8 Car configuration.
- Automated power supply with flexibility & Safety interlock system.
- 2 dedicated lines with overhead approach with safety interlock



End of Cycle facility

- New End of Cycle / PDI Shop of 205 m length with 14 positions for CHP / PDI
- Shop has been built with flexibility converting it into testing shop.

We have a dynamic test track facility that spans **950 meters** at our site

2.1

Key highlights

6

Multi Projects - Multi Lines
REM, ML3, Perth, Pune L3, DMRC
& CMRL



REM Project Successfully Closed

15 cars

Produced in Smart line
Highest Ever!



A pre-serial line has been
established for new projects

212 cars

Cars Delivered to customers in
FY23/24
Highest – Since Inception



Crossed **1000+** CBS milestone
achieved as of FY 24

Environmental highlights

- **1 MW rooftop solar** project – 25% indigenous production.
- **100% electricity** from renewables through green power purchase policy.
- **Dense forest (Miyawaki)** 3 phases implemented
- **Auto cut-off** mechanism implemented in all **streetlight & High mast**.



IGBC - Indian Green Building Council recognized as “**Green Campus**” under Gold category.

2.2

Project portfolio



Projects from SriCity - India

Customer	Project	Country	Product	SriCity's Scope	Timeline	Quantity	Qty Delivered
Chennai Metro Rail Limited (CMRL)	 CMRL Ph 1	 India	- Metropolis St. St - 25 kV/AC - Standard Gauge	- Rolling Stock	 2012-2018	132	132 
Kochi Metro Rail Limited	 KMRL	 India	- Metropolis St. St - 750 V DC - Standard Gauge	- Rolling Stock	 2015-2019	75	75 
Lucnow Metro Rail Corporation	 LMRC	 India	- Metropolis St. St - 25 kV/AC - Standard Gauge	- Rolling Stock	 2016-2018	80	80 
Chennai Metro Rail Limited (CMRL)	 CMRL Ph 1, Extn	 India	- Metropolis St. St - 25 kV/AC - Standard Gauge	- Rolling Stock	 2019-2020	40	40 
Mumbai Metro Rail Corporation	 MUMBAI L3	 India	- SMART Metropolis St. St - 25 kV/AC - Standard Gauge	- Rolling Stock	 2020-2023	248	168 LIVE
Pune Metro L3 (PITCMRL)	 Pune L3	 India	- Metropolis St. St - 750V DC - Standard Gauge	- Rolling Stock	 2023-2024	66	0 LIVE
Chennai Metro Rail Limited (CMRL)	 CMRL Ph 2	 India	- 25 kV/AC - Standard Gauge	- Rolling Stock	 - 2023-2025	78	0 LIVE
Delhi Metro Rail Corporation	 DMRC Ph 4	 India	- Metropolis St. St - 25 kV/AC - Standard Gauge	- Rolling Stock	 - 2024-2026	312	0 LIVE
Chennai Metro Rail Limited (CMRL)	 CMRL Ph 2 VO)	 India	- Metropolis St. St - 25 KV AC - Standard Gauge	- Rolling Stock	 - 2023-2025	30	0 YTS Yet To Start



Projects from SriCity - **Export**

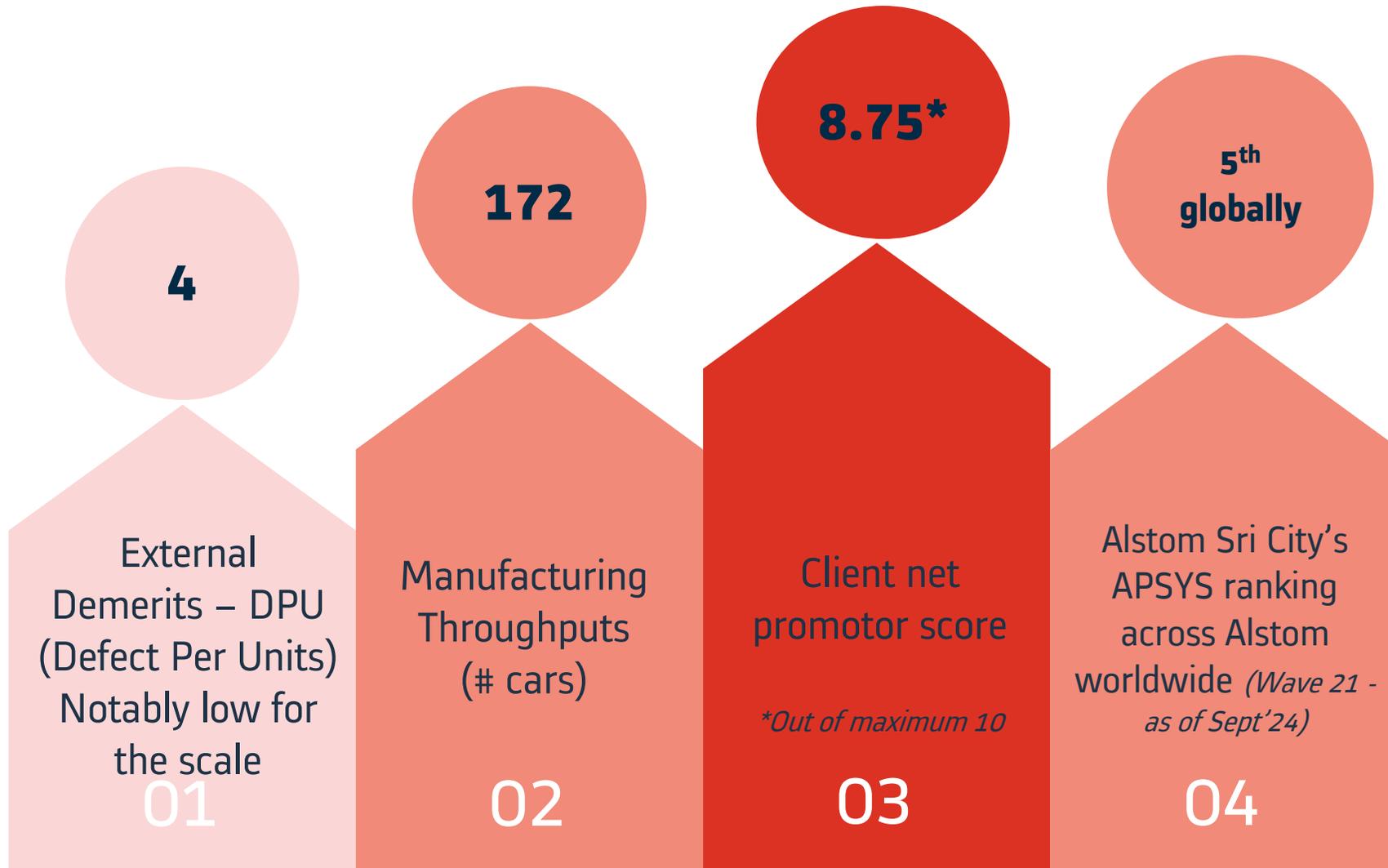
Customer	Project	Country	Product	SriCity's Scope	Timeline	Quantity	Qty Delivered
SJV (MTR+ UGL)	 SYDNEY NSW	 Aus	- Metropolis St. St - 1500 VDC - Standard Gauge	- Rolling Stock	 2016-2019	132	132 
Réseau express métropolitain	 Montreal	 Canada	- Metropolis St. St - 1500 VDC - Standard Gauge	- Rolling Stock	 2019-2023	212	207 LIVE
MTR Sydney	 Sydney Metro City & Southwest	 Aus	- Metropolis St. St - 1500 VDC - Standard Gauge	- Rolling Stock	 2020-2022	138	138 
Public Transport Authority	 Perth Metronet RS	 Aus	- SMART Metropolis St. St	- Car Body Shell	 2021-2028	252	56 LIVE

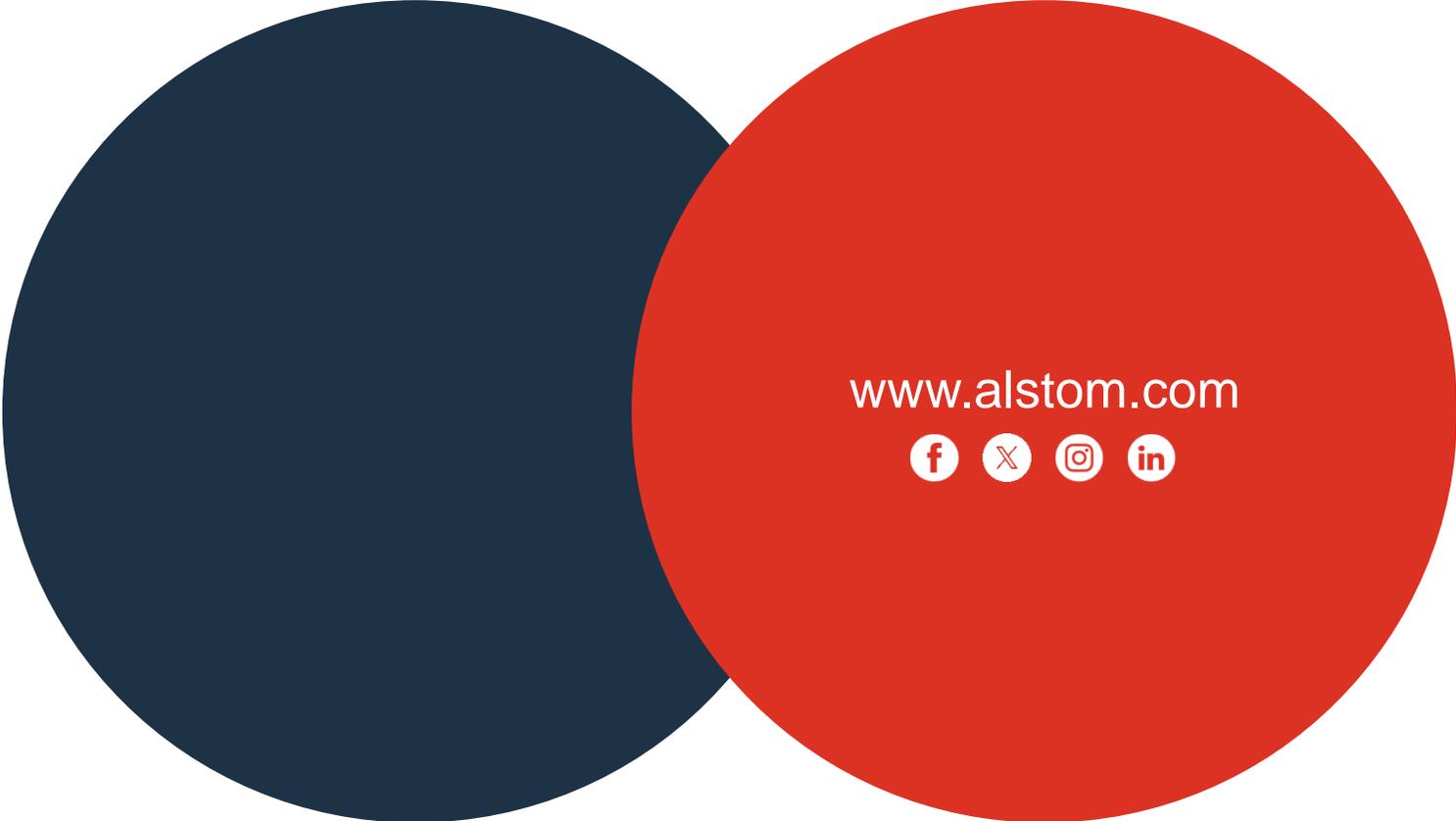
Production split between Domestic and Export- 66/ 34

2.3

Operational KPIs

Operational KPIs





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