



# Preparing and operating the REM in winter

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Réseau  
express  
métropolitain



# Agenda

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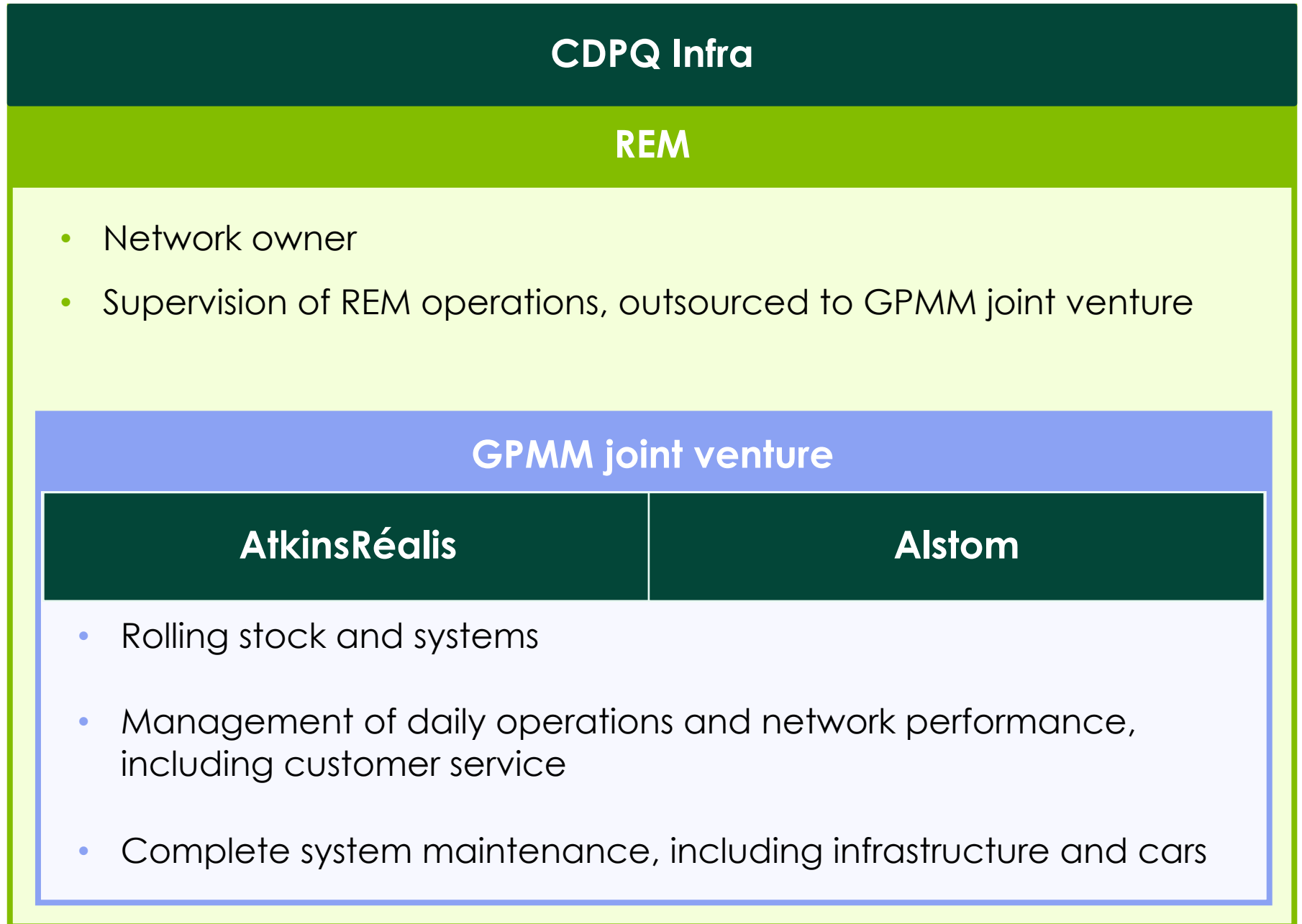


# REM operating partners



# REM operations

## Roles and responsibilities

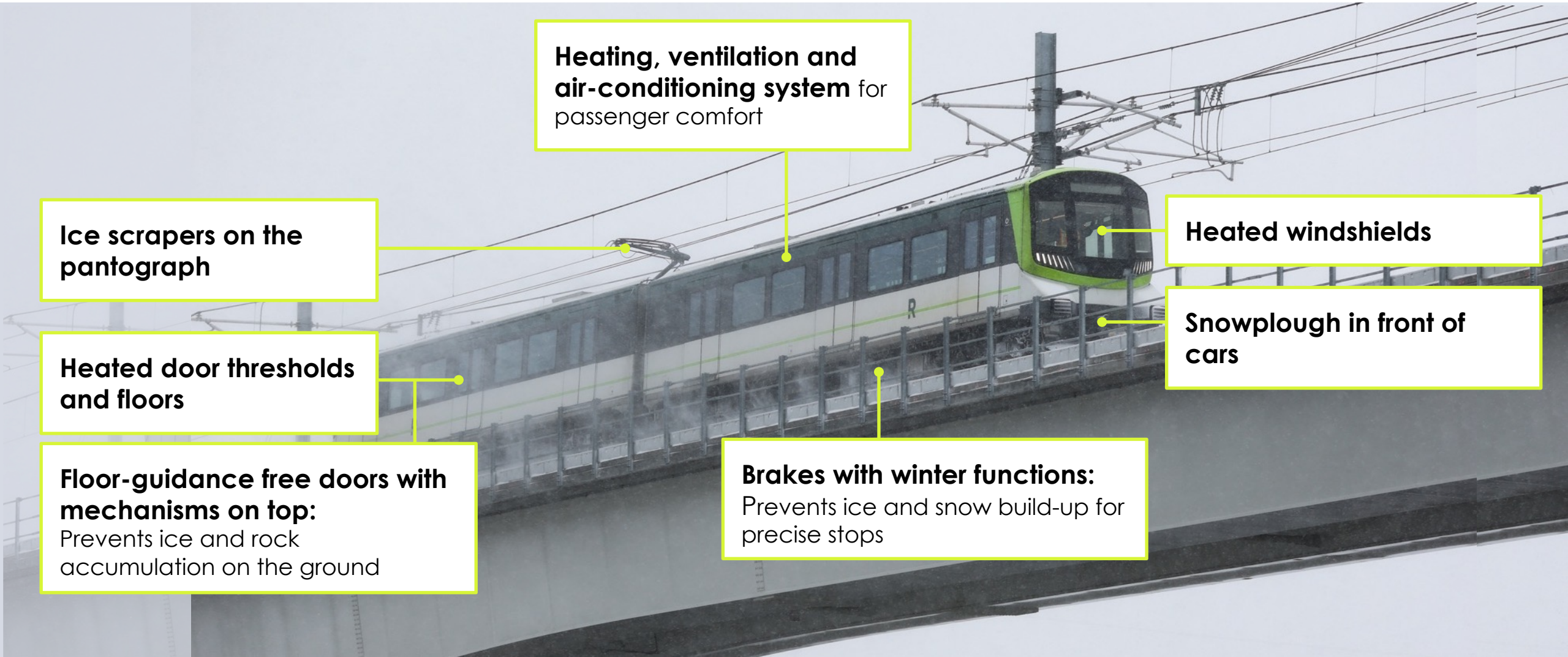




**Designed  
for winter  
in Montréal**

# REM cars

Designed, built and tested by Alstom for reliability



**Heating, ventilation and air-conditioning system** for passenger comfort

**Ice scrapers on the pantograph**

**Heated windshields**

**Heated door thresholds and floors**

**Snowplough in front of cars**

**Floor-guidance free doors with mechanisms on top:**  
Prevents ice and rock accumulation on the ground

**Brakes with winter functions:**  
Prevents ice and snow build-up for precise stops



# REM systems - GPMM

## Automated and accessible

**Radiant heating on platforms**

**Heated switch points** for high performance

**Landing doors with heated thresholds:**

To maintain the temperature in station

**Catenaries:**

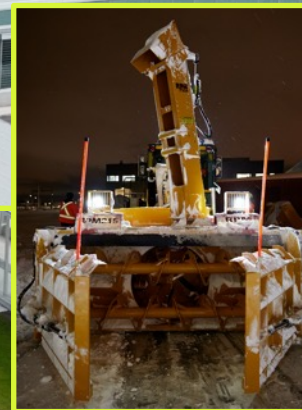
Posts and anchors sized to withstand the weight of snow, ice and wind.

**Clearing snow from tracks during storms:**

- Specialized machine
- Running trains outside operating hours to keep tracks clear

**Power supply:**

- Depends on a 25 kV distribution network.
- Substations and stations supplied by two independent sources on the Hydro-Québec network





# REM operations - GPMM

## Uncompromising commitment to safety

### Command Centre

- Real-time adaptation of operations
- In-station and in-train communications management
- Shuttle bus deployment, as needed

### Response agents

- Network deployment. Ready for quick intervention.

### Snow plan

Weather watch for the following 12 hours: prevention, track and switch preparation, team deployment.

### Security and control inspectors and customer service teams:

- Network deployment.
- Guaranteeing user safety.
- Real-time communication with users.

### Maintenance teams

Snow and ice removal from station accesses

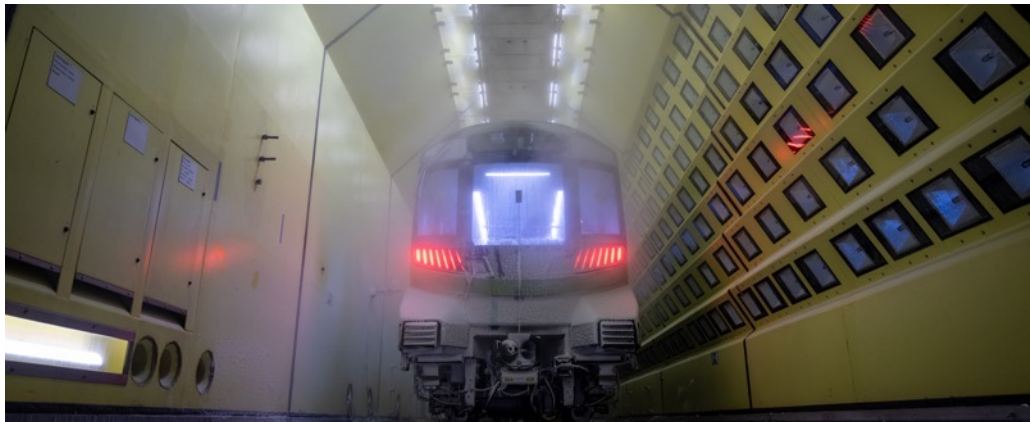






# First winter of operations

# First winter of operation



## Test phase before commissioning

- Tests in climate chambers
- Two winters of testing on a representative segment
- One winter of testing on the entire line between Brossard and Gare Centrale



## Real-life operation

- Procedures, interventions and systems have been tested and validated.
- On-board users bring new elements to which teams and systems adapt.
- Incidents are dealt with and improvements made.
- Passenger safety is always guaranteed.



# Improved communications for users

## 1

### Provide direct access to service status information

- ✓ Service status shown on the home page of the website (rem.info)
- ✓ More detailed messages available on all platforms

## 2

### Guarantee efficient communications in trains and stations

- ✓ Improve the deployment of accurate, real-time messages to inform users

## 3

### Increased team deployment across the network

- ✓ Employees in the field to support customers

## Communications tools available to reach users:

### IN STATIONS:

- Physical display
- Digital display
- Speaker system
- Teams

### IN EACH CAR:

- Digital display
- Speaker system
- Control center call button
- Teams

### DIGITAL:

- Web site rem.info
- X (Twitter)

# Our priority

Maintain a  
safe, reliable  
and accessible  
network  
for all users.



A stylized, dark green letter 'R' is positioned on the right side of the image. A horizontal bar, colored in a lighter shade of green, passes behind the letter, extending from the left edge of the image to the right edge. The background is split vertically: the left half is a solid light green, and the right half is white.

R