What's your next move?

2015 Activity Report

EUROVIA
VINCI

2015
ACTIVITY REPORT

37,000 projects near you and for you.

· Sud-Europe-Atlantique high-speed western gateway into Nice, France · France · Built a heavy-vehicle parking area along A8 between Aix-en-Provence and Saint-Maximin, France · Superstructure renovation for bridges in Klubina, at Gherghita, Romania · Renovation in the heart of Briançon, France · Vertical road signs in Saint-Lô, France · Development of a multimodal hub at Beauvais · Transformation of the city centre in Royan, France · Road-maintenance services for J-55 in the region of Maule, Chile · Roadworks/utility networks for the tramway line Prague, Czech Republic · Embankment fortification between Beaucaire and Fourques, France · Construction of RD120 (public-private partnersh for the new aquatic centre in Douai, France · Repairs to the track at the train station in Lyon, France · Repairs to A87N (eastern bypass at Angers), France · P Longwy buildings in Herserange, France · Roadworks/utility networks at the Dunkirk cross-Channel terminal, France · Dike-reinforcement in Chilliwack, Britis France · Expanded and strengthened docks at the port of Frouard, France · Two new sections for motorway D3, Czech Republic · Reinforcement and surface R6 in Bohemia, Czech Republic · Installation of gantries, cantilevers, masts, roadside directional panels, and new structures for Conseil régional de La Réunio utility networks for the Parc d'Aquitaine business area, France · First 2015 roadworks program for the Dunkirk urban community, France · Road maintenanc parking area at the air base in Mont-de-Marsan, France · Building a tunnel on the D3, Slovakia · Building a DIADEM centre at Bagnols-sur-Cèze, France · Rep new administrative building at the Westshore Terminal at Port Metro Vancouver, Canada · Improvement to a square at Arcs-sur-Argens, France · Building of Waterproofing the Nizerand viaduct, France · Roadworks and public spaces in Nice, France · Road signs for the Bordeaux bypass, France · Freckleton Street Urbain for Chronopost in Lille, France · Roadworks/utility networks for the Bellejouanne district in Poitiers, France · Electrification for the rail line betwee Chevrières, France · Construction of a platform for a Cofel mattress-production unit in France · Construction of a dike on the island of Sylt, Germany · Recalib France · Asphalt-maintenance for highways in Santiago, Los Andes and El Elqui concessions between Los Vilos and La Serena, Chile · Dismantling a skating ri of a production site at Myślenice-Polanka, Poland · Demolition of a tower in Champigny, France · Dismantling of bridges at a sugar refinery in Eppeville, Fra Czech Republic · Logistics platform for CAT at Batilly, France · Integrated signage offers for Lapeyre and Décathlon, France · High-impact operation at Juvi in Bordeaux, France · Implementation of Recyclovia on RD1089 in the Gironde, France · Tramway Line 4 in Montpellier, France · Westerode bypass, German RD999 in Montauban, France · Rehabilitation of the rail line connecting Pardubice to Ždírec nad Doubravou, Czech Republic · Urban development in Villeb lines in Košice, Slovakia · Development of Place de la République in Gramat, France · Repairs to the surface course of A31, France · Development of Bosqu demolition of a water tower in Dourges, France · Development of the Bourgades district in Aramon, France · Blast demolition of a building at La Duchère in and technology park in Terville, France · Development of multiple platforms at the Paluel nuclear power station, France · Bridge reconstruction on Flo Puy-L'Évêque, France · Redevelopment of the Saint-Quentin rail station square, France · Transformation of a roundabout in Berkshire, United Kingdom · Rep in Orlando, United States · Signs for stage 10 of the Tour de France at La Pierre-Saint-Martin, France · Asphalting on RD64 at Dame-de-Courson and Les Mou Pyrenees stages 10, 11 and 12 of the Tour de France, France · Maintenance for Metro Line 2 in Paris, France · Widening of Florida State Road 21, United State departmental roads in the Lot region, France · Reinforcements on RD903 at Saint-Jean-Delnous for stage 13 of the Tour de France, France · Cold asphal France · Implementation of Recyclovia in the wine-growing region near Nantes, France · Widening of A71 between Theillay and Vierzon, France · Asphalt sup Douelle, France · Building the Lohéac diversion, France · Construction of the child health and safety centre in Karlovy Vary, Czech Republic · Widening of A63 21 of the Tour de France, France · Repairs to the surface course on highway A13, Luxembourg · Repairs to asphalt paving in both directions on A154 in Louv MAAF, France · Construction of a bridge between the villages of Chyrzyna and Krzywcza, Poland · Modernization of the Trilport line in Bazoches, France Highway services for Central Bedfordshire, United Kingdom · Demolition of Lothaire bridge in Metz, France · Cold asphalt mix for Conseil général du Nord, Fra de la Bièvre in Chatillon, France · Expansion of École Supérieure d'Ingénieurs des Travaux de la Construction in Caen, France · Construction of services lanes region, France · Repairs to highway D2 pavement, Czech Republic · Dismantling of the Storck 1 tower in Aubigny, France · Development of the Grâce de Dieu ro utility networks along T8 in Île-de-France, France · Demolition of the Kronenbourg brewery in Strasbourg, France · First section of Rail Baltica, Lithuania · Impr of the metal structure on the Bratislava bridge, Slovakia · Development of the Baudens eco-district in Bourges, France · Renewal of tracks and concrete ec DN24 and DN28 near Iaşi, Romania · Requalification of roads and ramps on RN89 in the Gironde, France · Development of the technology hub in Lahitolle, F France · 4th "suite rapide" for SNCF Réseau in Île-de-France, France · Works at a tourism residence in Mimizan, France · Rehabilitation of slabs in the aircraft p on A43 at Lavaret between Lyon and Chambéry, France · Renovation of the roundabout at Porte de Paris in Poitiers, France · Upgrades to D1, Czech Repub Implementation of Recyclovia in a marshy area in the Gironde, France · Car park at the Carré-Sénart shopping centre, France · Work on the funicular at la C "Petit Lay", France · Restructuring the top surface of the deck of Pont de la Haute-Chaîne, France · Transformation of the Hull city centre, 2017 U.K. City of Cu utility networks near new wineries in Cognac, France · Rehabilitation of A2 near Dortmund, Germany · Road renewal on RN10 in the Charente, France · Sec Rehabilitation of the Alpha runway at Paris Charles-de-Gaulle Airport to accommodate the Airbus A380, France · Riprap for the quayside at Cherbourg, Fran · Redevelopment of the Hôtel de Ville district in Chartres, France · Roundabout in Vigan, France · Repairs to the Geležinis Vilkas roundabout and at Escœuilles, France · Construction of a bicycle path at Vulaines-sur-Seine, France · Road surface repairs on the Confederation Bridge, Canada · Developme in Fontainebleau, France · Redevelopment of the tourism zone in the Port of Calais, France · Cold asphalt mix in the region of Cluj, Romania · Expansion of th in the communes of Gonesse and Bonneuil-en-France), France · Nakło Nad Notecią bypass, Poland · Improvements to the city centre in Souzy, France · Earthw of road I/11 Mokré Lazce, Czech Republic · Road reinforcement on RD62 in Carnon, France · Works on engineering structures of the rail bypass in Nîmes and River at the railway station in Juvisy, France · Repairs to the surface course of the commercial parking area at Poitiers Biard airport, France · Runway at Montre at Paris-Charles-de-Gaulle Airport, France · Improvements to Majakowskiego Street in Dąbrowa Górnicza, Poland · Development of a business zone in Vit Intermodal Yard at Deltaport, British Columbia, Canada · Repairs to the asphalt on A26 at Thennelières east of Troyes, France · Earthworks, drainage, roadwo the Massa river bed in Switzerland · Construction of a logistics platform for Les Mousquetaires in Bourges, France · Renewing switches & crossings at the Vill RN4 at Saint-Aubain, France · Levelling the "Rhins" river weir, France · Enhancing safety at Graves-de-Mer roundabout in Dieppe, France · Renovation of Pase neworks at Parc Barbieux in Roubaix, France · Repairs to Cour des Offices du Château de Fontainebleau, France · Regional road 102 toward Švenčionys, Lithu Samson-sur-Rance, France · Rehabilitation of the Faisanderie stadium in Fontainebleau, France · Delivery of the Hroznětín diversion, Czech Republic · Resid France · Construction of the "Race of Champions" track at Queen Elizabeth Stadium in the Stratford area of London, United Kingdom · Temporary and perm road in Nantes, France · Removal of 2 level crossings in Haute-Savoie, France · Construction of Chrudim bypass, Czech Republic · Promenade de Flandre shop and related equipment at Halle Freyssinet in Paris, France · 2nd segment of Boulevard Urbain Ouest in Montauban, France · New rail siding for Sablières Malet

rail line, France • Construction of the Northwest Corridor, Atlanta, United States • Recreated ecosystems in the Yville-sur-Seine quarry, France • Redeveloped Roadworks in the Tarapacá desert, Chile • Intermodal hub at Puy-en-Velay train station, France • Construction and renovation in the heart of Barbazan-Debat, Slovakia • Improved access to Grand Port Maritime in Rouen, France • Demolition of 2 structures on A9 in Montpellier, France • Construction of a road interchange -Tillé airport, France • Highway maintenance and improvement contract for Southend Council, United Kingdom • Drainage system for the Saclay Plateau, France new aquatic centre in Limoges, France • Implementation of dynamic control equipment on RN346 (eastern bypass at Lyon), France • Renovated the Střešovická nip in the Cantal region), France • Roundabout in Figeac, France • Construction of tram tracks in Rio de Janeiro, Brazil • Roadworks/utility networks and landscaping Pouring of the millionth square metre of asphalt paving in Hounslow, United Kingdom • Resanding of Axo'Plage, France • Demolition of Société de Train Universel sh Columbia, Canada • Improvements to the area around the museum of automatons in Souillac, France • Conversion RD9 sections into A89 motorway segments, course works on A8 between Villeneuve-Loubet and Antibes, France • Development of the street and the church square in Donzacq, France • Opening of highway on, France • Upgrades of the Belvédères tourist railway track in Saint-Priest, France • A50 project for the Midlands Highways Alliance, United Kingdom • Roadworks e in the province of Murcia, Spain • Transformation of a bicycle path between Blois and Vineuil, France • Gantry on A71, France • Development of a light-vehicle pairs to the paving stones at the entrance to the walled city of Concarneau, France • Road upgrades in Maurienne, France • Development of the area around the f a platform for Brico Dépôt in Laon, France • Track renewal between Langeac and Langogne, France • Renovating the historic centre in Pilsen, Czech Republic • link road in Blackburn, United Kingdom • Development of a parcel for Louise Michel housing construction project at Bolbec, France • Building Espace Logistique n Šumperk and Kouty nad Desnou, Czech Republic • Civil engineering for basins at Place Nelson Mandela in Grenoble, France • Installation of a AZBox basin in prating the road in the Somme, France • Replacement of tracks between Nevers and Cosne-sur-Loire, France • Development of rue Pierre Rouxel in Saint-Barnabé, nk in Strasbourg, France • Renewing switches & crossings at Lyon-Guillotière, France • Wet and dry networks in the district of Lyon Gerland, France • Construction nce • Roadworks/utility networks at Collège François-Rabelais in Poitiers, France • Extension of the bike path/bridge between Doubský, Tašovice and Svatošská, sy train station, France • Upgrading Schandauer Strasse in Dresden, Germany • Earthworks, drainage, roadworks and landscaping for Matmut Atlantique stadium y • Waterproofing roadway viaduct on A16, France • Development of the east-side square at Angoulême train station, France • Implementation of Recyclovia on rumier, France • Transformation of Place des Tapis in Lyon, France • Construction of an industrial platform for LTR Vialon in Renaison, France • Modernizing tram uet du Théâtre d'Eau at Parc du Château de Versailles, France • Maintenance of roadways A30 and A35 between Exeter and Bere Regis, United Kingdom • Blast Lyon, France • Construction of a business area in Jasienica, Poland • Redevelopment of the Uckange train station, France • Creation of a platform for a business rida State Road 50, United States • Implementation of Recyclovia on mountain roads in the Western Pyrenees, France • Repairs to the Pescadoires bridge in pairs to A7 pavement, France • Signs for stage 5 of the Tour de France for Amiens Métropole, France • New section for RD9, France • Widening of State Road 528 utiers-Hubert for stage 7 of the Tour de France, France • Diversion of road I/37 in the Pardubice region, Czech Republic • Repairs to departmental roads in the High es • New roundabout in Squiffiec, France • Renovation of Place des Croix in Pélussin, France • Ciechanów bypass, Poland • Low-granulometry surface dressings for t mix on A75 in the Lozère and the Cantal, France • Upgrade of International Drive, United States • Changes to the Chancellerie joint business area in Bourges, ply for "I-4 Ultimate Improvement", United States • New access road for the Saint-Grégoire business area, France • Cold asphalt mix on RD8 between Luzech and 8 in the Basque region, France • Rail renewal at the multimodal transport centre in Valenton, France • Parking area of light vehicles and buses in Meudon for stage iers, France • Improvements to boulevard des Provinces françaises in Nanterre, France • Implementation of environmental products for Bâtiment Prévert for the e • Rehabilitation of exteriors at the Fréderic Mistral campus in Avignon, France • Renovation of the Carrefour shopping complex in Villiers-en-Bière, France • nce • Creation of a storage platform for Lorca in Hauconcourt, France • Construction of a new segment on S19, Poland • Improvements to Promenade des Vallons for an industrial zone in Paterek, Poland • Development of Jardins de l'Arche at La Défense, France • Maintenance services for two national routes in the Yvelines undabout in Bezons, France • Repaits to the Střešovická Street tram line in Prague, Czech Republic • Development of micro-places in Béziers, France • Roadworks/ rovements to the three streets in La Motte, France • Cold asphalt mix in Haute-Garonne, France • Renewal of switches & crossings in Valenton, France • Installation quipment at the Aiguebelle railway station, France • Reorganization and expansion of the Leclerc shopping centre in Saint-Paul-lès-Dax, France • Restoration of rance • Bus rapid transit system in Nîmes, France • Supply of blocks for the Cowes breakwater, United Kingdom • Expansion Carrefour shopping centre in Bourges, arking areas at Düsseldorf airport, Germany • Construction of an industrial platform for Goodman in Saint-Gilles, France • Improvements to the highway rest stop olic • Improvements to the city centre of Lamballe, France • Brest northern bypass, France • Rebuilding at Taltal following heavy rain in late March 2015, Chile • Grande Motte in Tignes, France • Asphalt paving on A15 in Montreal, Canada • Repairs over 11 km on RN12 in the Finistère, France • Construction of Viaduct of the lture, United Kingdom • Taxiways at Toulouse-Blagnac airport, France • Development of car parks P1 and P2 at the Lascaux IV site, France • Earthworks, roadworks/ lants applied to the car parking at La Valette-du-Var, France • Installation of gantries near Rouen, France • Upgrade to the main thoroughfare in Iaşi, Romania • nce • Place Jeanne-Hachette in Beauvais, France • Upgrades to streets in the historic city centre of Cluj-Napoca, Romania • Repairs to RN12 in the Yvelines, France d the Vilnius bypass, Lithuania • Renewal of the surface course on A41 between Pontcharra and the Touvet interchange, France • Night work on RN42 ent of public spaces near Tower D2 and the Melia Hotel and upgrades to the ring road at La Défense, France • Works at Centre National des Sports de La Défense e Fame plant "aux Grandes Loges", France • Repairs to RN12 in the Finistère, France • Construction of Boulevard Intercommunal du Parisis (connecting RD84 to it works for the construction of a platform for a solar panel farm in the Gard, France • Roadworks for the Rive Gauche business area in Montpellier, France • Opening Montpellier, France • Drainage systems and roadworks for 10 villages near Čakovec, Croatia • Construction of a system to discharge groundwater into the Seine eal International Airport, Canada • Construction of a utility tunnel in Nanterre, for the delivery of power to La Défense, France • Under-taxiway passage for vehicles try-le-François, France • Requalifying the Salaison business area in Vendargues, France • Renewing roads along RN176, France • Civil engineering works for the rks/utility neworks at Halle de Pantin, France • Renewing surface course for A404 between Saint-Martin-du-Fresne and Oyonnax, France • Basalt supply to renew eneuve-Saint-Georges train station, France • Renovation of the Bar-le-Duc city centre, France • Gripfibre® on the island of Jersey, United Kingdom • Rejuvenating o Placer in the Franklin district in Santiago, Chile • Cold-mix asphalt on A62 between the Castelsarrasin and Montauban interchanges, France • Roadworks/utility ania • Development of Côte Saint-Catherine in Bar-le-Duc, France • Renewing the roadway on RN176 which crosses Pleslin, Plouër-sur-Rance, Quévert and Saint- dential conversion for a property in Mée-sur-Seine, France • Wastewater collection for Parc Olympique Lyonnais, France • Bus rapid transit system in Martinique, anent roads and drainage system for Grand Stade de Lyon, France • Gantries for the western ring ping centre in northern France • Upgrades to Invalidenstrasse in Berlin, Germany • Pumping station in Montaut, Ariège region, France • Two worksites at the feet of the Cologne Cathedral, Germany •

Thank you.

ALWAYS ON THE MOVE, TO HELP YOU GET AHEAD

As a local partner, Eurovia develops mobility solutions designed to enhance local economic competitiveness and strengthen social bonds by designing, building and maintaining transport infrastructure and fostering urban development.

EUROVIA
AT A GLANCE

€7,900 MILLION
REVENUE

400 QUARRIES

400 DIVISIONS

69.4%
Transport infrastructure and urban development

REVENUE BY BUSINESS SECTOR

12.5% Industrial production
9.5% Quarries
8.6% Services

€233 M
OPERATING INCOME FROM ORDINARY ACTIVITIES
3% of revenue

€432 M
CASH FLOW
5.5% of revenue

38,000 EMPLOYEES

37,000
WORKSITES IN 2015

4 BUSINESS LINES: Works - Quarries - Industries - Services

What's your **next move**?

OUR CODE OF ETHICS

Responsibility and Accountability are key values for Eurovia.

Wherever we operate around the world, we are driven by the same will to conduct ourselves in an exemplary manner with respect to all our stakeholders. I am calling on all Eurovia employees to act in compliance with all applicable regulations, reinforced by the requirements set out in the VINCI Code of Ethics and Conduct which defines our good practices.

The success, development and sustainability of Eurovia require strict compliance with these good practices by everyone, without exception.

Pierre Anjolras,
President of Eurovia

OUR VALUES

Client satisfaction

Safety

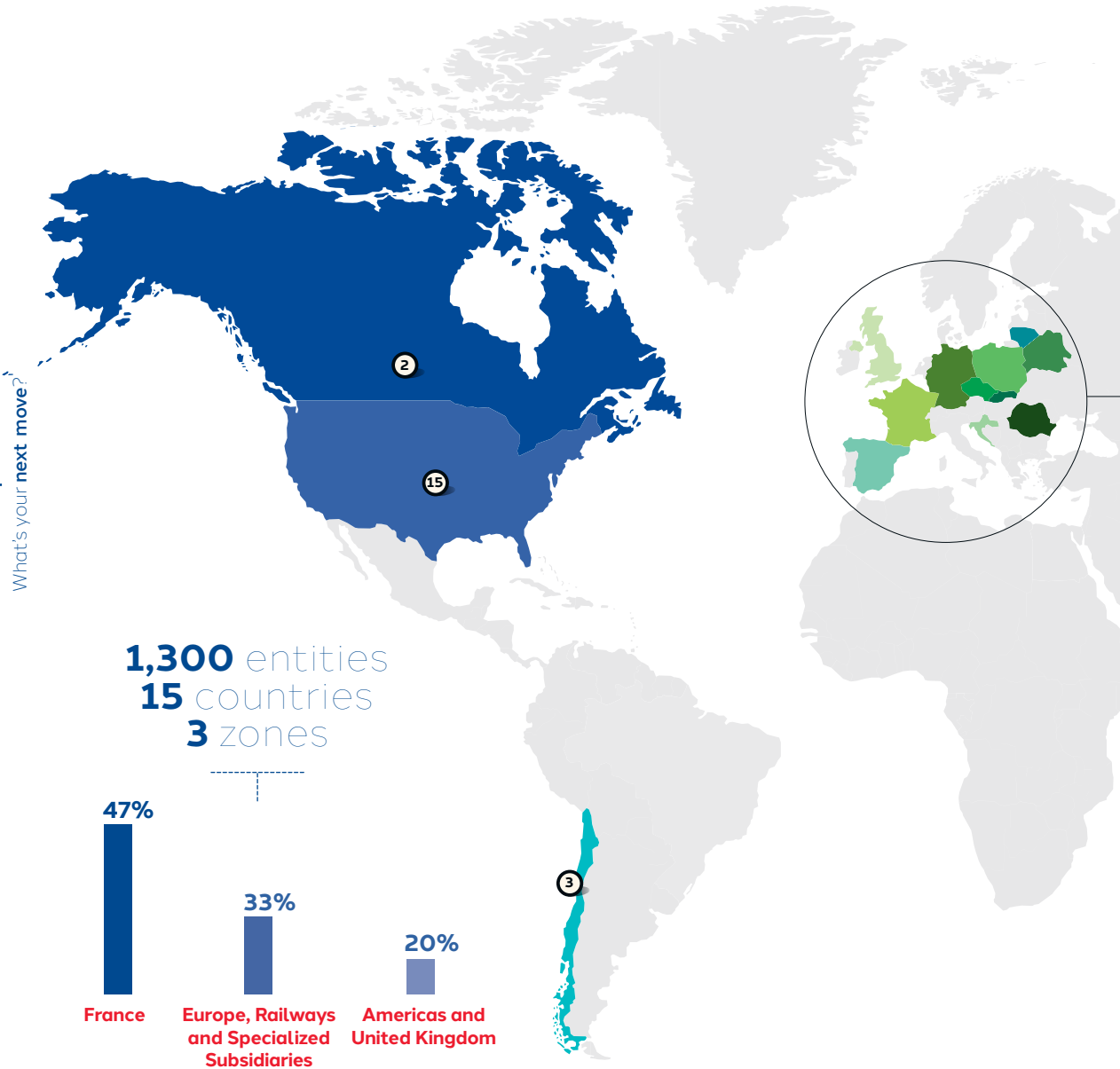
Responsibility & accountability

Team work

Innovation

Entrepreneurship

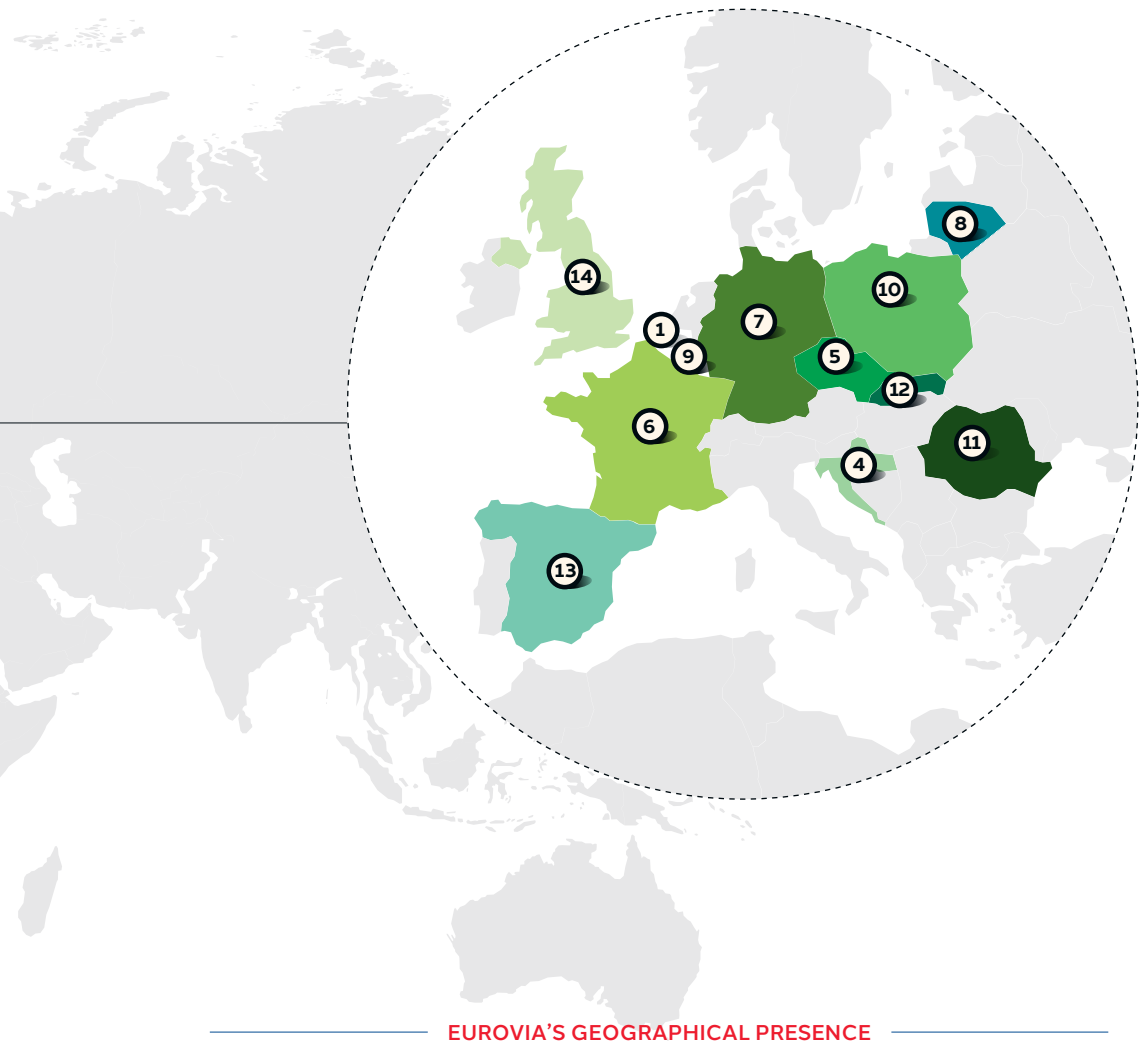
EUROVIA
AROUND THE WORLD



1,300 entities
15 countries
3 zones

REVENUE BY GEOGRAPHICAL AREA

What's your **next move**?



EUROVIA'S GEOGRAPHICAL PRESENCE

1 — Belgium
2 — Canada
3 — Chile
4 — Croatia
5 — Czech Republic
6 — France
7 — Germany
8 — Lithuania
9 — Luxembourg
10 — Poland
11 — Romania
12 — Slovakia
13 — Spain
14 — United Kingdom
15 — United States

TOGETHER with Eurovia

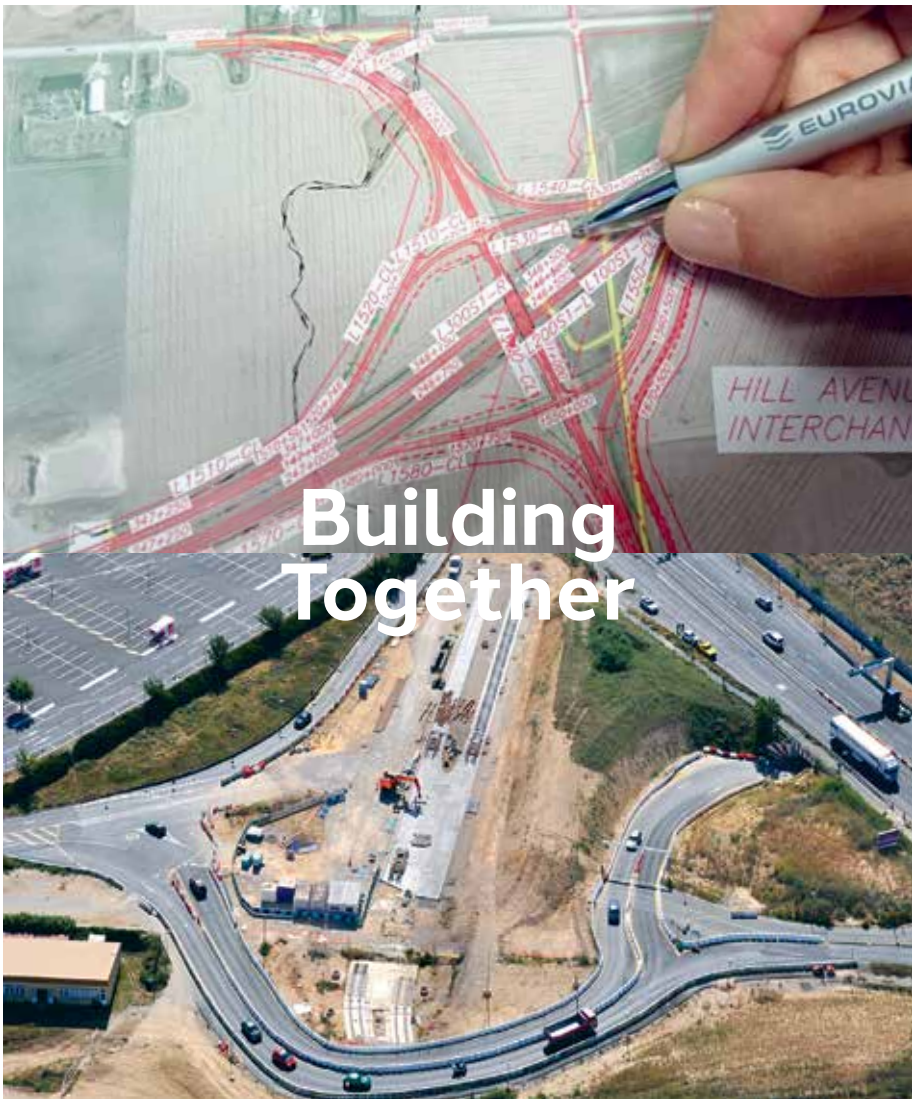
Open the way,
improve access.
Create movement
and foster sharing.

On every project,
make progress and apply
innovation in the field,
through the use
of materials
and equipment.

Every day, take care
of the infrastructure
heritage we design
together.

PREVEN+

PREVEN+ is a new training tool for occupational safety and accident prevention designed by Eurovia. It uses 3D animation to create an interactive and immersive experience for trainees in the Group's four business lines. PREVEN+ is a real innovation in training and public works and received several awards in 2015.



Building Together

Regina Bypass, Canada

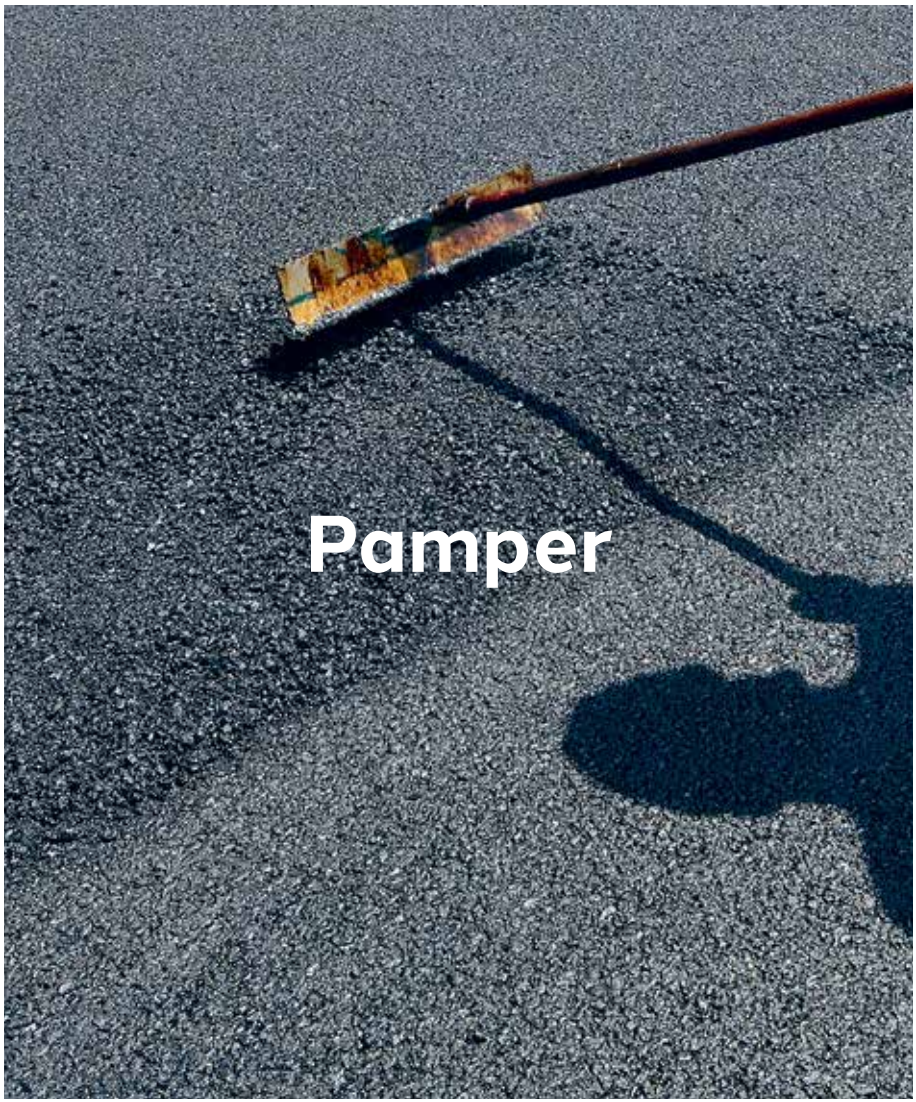
Eurovia is taking part, through its Canadian subsidiary Carmacks, in a major highway bypass project in the capital city of the province of Saskatchewan in central Canada. This public-private partnership contract brings together several VINCI Group subsidiaries, pooling their complementary areas of expertise. The Regina Bypass will contribute to the province's economic and urban development.

Versailles, France
In the gardens of Château de Versailles, the Water Theatre Grove designed by André Le Nôtre in 1671 has been restored as part of a project to create a contemporary garden. Eurovia took part in building the basin and sandy promenades around the fountain in collaboration with landscape artist Louis Benech and visual artist Jean-Michel Othoniel.

Jakubcovice, Czech Republic
In its aggregate-production activities, Eurovia attaches the greatest importance to cooperation with local stakeholders and the rehabilitation of quarrying sites at the end of operations. "Open-day" events held at the Jakubcovice quarry – the Czech Republic's largest – drew some 1,500 visitors in May 2015.

Railway projects, France

ETF, a subsidiary of Eurovia, is constantly innovating in efforts to speed up rail projects for the benefit of users. To build the SEA HLS Tours-Bordeaux line, a sleeper-installation trailer and continuous welded rail (CWR) “pusher” wagon were used. To renew the rail network in the Île-de-France region, the use of the “suite rapide” train for dense urban zones restored the track in record time.



Province of Murcia, Spain
Eurovia will continue to care for the 190 km of national routes and highways in the province of Murcia, thereby sustaining a 20-year business relationship with the government of Spain built on trust. Two new contracts calling for general and highway maintenance have been awarded to Eurovia for a period of at least four years.

Injecting new life into materials
Eurovia conducts pioneering research to recycle materials. Recyvia® and Recyclovia can already be used to create wearing and base courses made from 100% recycled materials. Eurovia can also recycle already recycled materials to create asphalt mixes. All of this is good news for preserving raw materials.

Young women engineers

Welcome to young women engineers

Before she was hired by the Major Projects division, *Ane Ezenarro Beristain (originally from Spain and studied and graduated in France)*, a student at École des ponts et chaussées, won first prize in Eurovia's 2015 end-of-study project contest in France. Her project focused on the widening scheme for motorway A63 between Biarritz and Biriatou.

Joanne Huett (Great Britain), a student in civil engineering at the University of Southampton, has begun her last year in the graduate-integration program at Eurovia, where she had the opportunity to work on the exciting Isle of Wight project and be selected as an ambassador for the Institution of Civil Engineers.

Plug and play

Vega station, France

A healthy and thrifty mode of transport. An electric vehicle powered by a renewable source of energy. A comprehensive service for communities and businesses seeking to develop a fleet of free-access bicycles. The Vega plug-and-play solar-powered station for electric bikes is all of this. This innovation was presented by Eurovia at the COP21 Solutions in December 2015 and has been developed as part of an open-innovation partnership with a start-up.

Our clients' needs are evolving, and so are we

Pierre Anjolras, President of Eurovia

How is Eurovia doing?

P.A. In 2015, facing fluctuating and inconsistent market conditions, Eurovia demonstrated how robust its business model is. The high performance of our international operations and high volume of railway projects were able to limit the impact of the considerable decline in roadworks in France. Despite the drop in our sales figure, we sustained a 3% operational margin.

What are Eurovia's strengths?

P.A. In addition to the diversity of its business lines and geographical locations, Eurovia develops a management model that is both integrated and strongly decentralized. Our "Building Together" corporate project, launched in 2015, reasserts the fundamental components of our business model and consolidates our company-wide culture by focusing all of our teams on shared operating performance objectives. Let's take safety, for example: the fourth edition of our International Safety Day allowed us to mobilize teams from all sites and all divisions around the world on this key issue.

What is your value proposition for the market?

P.A. By choosing Eurovia, you choose a partner who is local, innovative, and committed to your success. We can mobilize our network of autonomous business units wherever needed in order to implement our operational excellence in the field and meet our clients' expectations. This is true of the 37,000 projects we manage on a daily basis and of major, large-scale projects. Over the long term, our network of quarries develops circular-economy solutions, while Eurovia designs and tests techniques and innovations in real-world conditions that lead to optimal maintenance methods for roadways and railways.

"Our 'Building Together' corporate project reasserts the fundamental components of our business model and consolidates our company-wide culture."

What is the outlook for Eurovia?

P.A. In France, we will pursue efforts to adjust to a challenging market. Elsewhere in Europe, the implementation of significant funding for transport infrastructure – including the public-private partnership program in Germany and European Union funding in central Europe – will support our activities. In the Americas, Eurovia's activity will remain at a steady level in the United States thanks to contracts awarded to Eurovia in 2015. In Canada, the new government's investment plan, which is focused on infrastructure, opens up new opportunities for our subsidiaries.

And what is your next move?

P.A. Eurovia will proactively pursue its international development strategy in the railway sector and in a more targeted manner in the Americas. In addition to external growth, we will extend our value chain further upstream into infrastructure design and further downstream into maintenance services. In short, we will fully develop our capacity as a full-service provider, especially in projects developed in synergy with other VINCI entities. Finally, by extending the scope of our business, we will create value and foster the emergence of tomorrow's smart infrastructure.

EXECUTIVE COMMITTEE

1

— Pierre Anjolras

PRESIDENT

Born in 1966. He is an engineer and graduate of *École polytechnique* and *École des ponts et chaussées*. He worked for the Loire-Atlantique department of infrastructure and, later, the European Commission's Directorate-General for External Relations, before joining the VINCI Group in 1999 as the regional director of Sogea Sud-Ouest. In 2004, he became the chief executive officer of Cofiroute before being appointed chief executive officer at ASF in 2007. He joined Eurovia on May 1st, 2010 as deputy executive officer in charge of international and public-private partnerships. He was appointed President of Eurovia on March 1st, 2014.

2

— Jean-Pierre Paseri

DEPUTY CHIEF EXECUTIVE OFFICER, FRANCE

Born in 1963. He is an engineer graduate of *École spéciale des travaux publics*. He joined EJL in 1987. In 1989, he became a works engineer for Viafrance; later, he was appointed sector manager for the Bois d'Arcy's division. In 1994, he began serving as a division manager, overseeing several Eurovia divisions in France until 2005, when he was appointed regional director of Eurovia, Île-de-France, and then delegate director for ETF and Specialized Subsidiaries in 2009. In 2015, he was appointed deputy chief executive officer for France and joined the Executive Committee.

3

— Patrick Sulliot

DEPUTY CHIEF EXECUTIVE OFFICER, AMERICAS AND UNITED KINGDOM

Born in 1959. He is an engineer graduate of *École nationale supérieure des arts et métiers*. He joined Eurovia in 1984 as a works engineer. Over the years, he has served as division manager in Paris and Lyon, regional director for Rhône-Alpes, and, in 2000, delegate director in Rhône-Alpes Auvergne. In 2007, he became Deputy Managing Director of Eurovia Limited in the United Kingdom. In 2010, he was appointed delegate director overseeing the United Kingdom, Spain, and Chile. In 2012, he was appointed director for the Americas and, in 2015, he became a member of the Executive Committee.

4

— Xavier Neuschwander

DEPUTY CHIEF EXECUTIVE OFFICER, EUROPE, RAILWAYS AND SPECIALIZED SUBSIDIARIES

Born in 1957. He is an engineer graduate of *École polytechnique* and *École des ponts et chaussées*. He began his career at GTM in 1983. After working on several major highway and high-speed rail projects, he was appointed president of VINCI Construction Terrassement in 2000. In 2010, he was appointed to lead the SEA project, concurrent with his position as president. He joined Eurovia in March 2014. He is also president of the technical commission at FNTP (France's national public works federation).

5

— Jean-Damien Pô

HUMAN RESOURCES AND SUSTAINABLE DEVELOPMENT DIRECTOR

Born in 1974. He studied at *École normale supérieure Lettres et sciences humaines* and *Institut d'études politiques de Paris;* he also holds a Ph.D. in literature. After serving as executive director at Institut de l'entreprise, he joined VINCI in 2011 as secretary to the Executive Committee, before becoming director of human resources development. He joined Eurovia in January 2014.

6

— Patrick Jutier

CHIEF FINANCIAL OFFICER

Born in 1961. He is a graduate of *École supérieure des sciences commerciales d'Angers* where he earned a diploma in advanced accounting studies. He joined Cochery Bourdin Chaussé in 1983 and was appointed administrative director for specialized subsidiaries in 1989. From 1995 to 2004, he oversaw administrative and financial management at SGE-Verkehrsbau Union GmbH in Berlin and, later, Eurovia GmbH in Bottrop. In 2004, he joined Eurovia as a head of mission reporting to senior management before being appointed to the Executive Committee in 2005.

STEERING COMMITTEE

This committee includes Executive Committee members as well as the following members*:

- **Uwe Arand** Executive Director, Eurovia GmbH (Germany)
- **Robert Bello** Delegate Director, Île-de-France - Normandie Region (France)
- **Luc Bodson** Delegate Director
- **Martin Borovka** Chief Executive Officer, Eurovia CS (Czech Republic and Slovakia)
- **Alan Cahill** Chief Executive Officer, Hubbard Group (United States)
- **Jean-Marie Dayre** Chairman of the Supervisory Board, Eurovia GmbH (Germany)
- **Didier Deschanel** Delegate Director, Specialized Subsidiaries (France)
- **Keith James** President of Carmacks (Alberta, Canada)
- **Christophe Jozon** Director, Materials and Industries (France and Belgium)
- **Chadi Khaled** Executive Director, Eurovia Infra
- **Tanguy Le Blay** Delegate Director, Ouest/Antilles Region (France and French West Indies)
- **Christophe Minier** Delegate Director, Nord-Est/Belgique Region (France and Belgium)
- **Pierre Monlucq** Delegate Director, Centre-Est Region (France)
- **Miguel Musalem** Executive Director, Bitumix (Chile)
- **Maxence Naouri** Director of Communications
- **Kim Percy** President of BA Blacktop (British Columbia, Canada)
- **Philippe Princet** Director of International Development
- **Carlos Ortiz Quintana** Chief Executive Officer, Probisa (Spain)
- **Jean-Marc Reibell** Delegate Director, Centre-Aquitaine Region (France)
- **Eric Rouffet** Executive Director, Eurovia Polska (Poland)
- **Jean-Noël Velly** President of ETF and Deputy Executive Officer of Eurovia, overseeing ETF and Eurovia Infra
- **Christophe Verweirde** Delegate Director, Southern (France)
- **Scott Wardrop** Chief Executive Officer of Eurovia UK (United Kingdom)

** On May 1st, 2016.*

SAFETY CULTURE

— MAKING A DAILY COMMITMENT TO OCCUPATIONAL HEALTH AND SAFETY

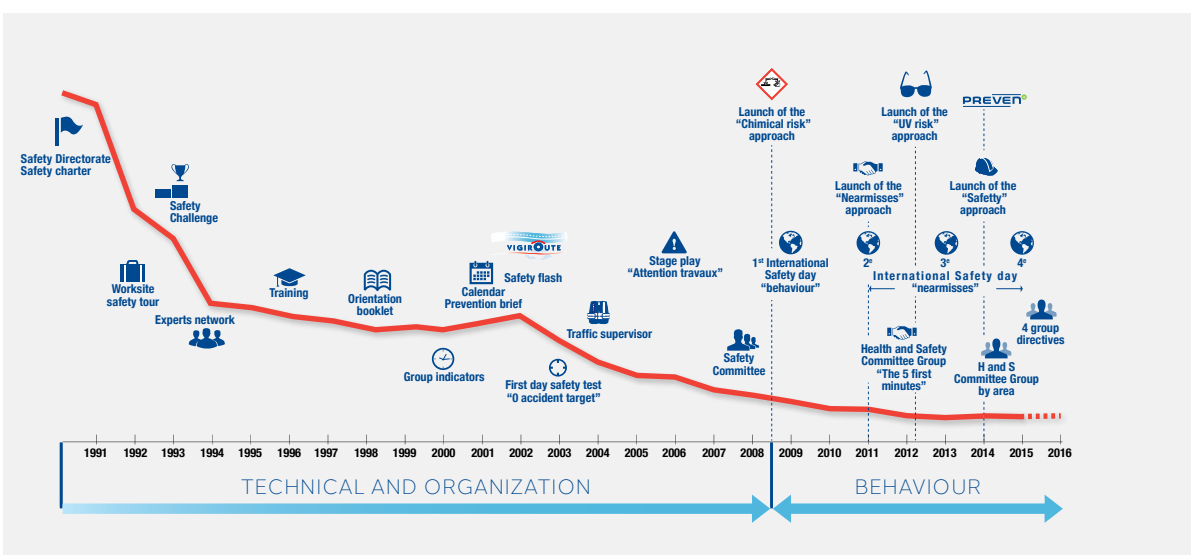
Wherever Eurovia operates around the world, its top priority is always safety. The company has reduced its accident frequency rate by half in ten years, and the severity rate by 25%.

312

EUROVIA GROUP ENTITIES WHICH ACHIEVED "ZERO-ACCIDENT" TARGET IN 2015

— PARTNERSHIPS TO FOSTER SAFETY AND RESEARCH

In efforts to assess operation-related hazards on a continuous basis, Eurovia has built partnerships with various scientific establishments, including INRS (France's national research and safety institute) and CHU de Grenoble (the city of Grenoble's university hospital centre), to manage workers' exposure to asphalt mixes. This spirit of cooperation has also given rise to a partnership with INERIS (France's national institute for industrial settings and related hazards) to manage health hazards tied to its industrial activities.



— A SAFETY POLICY AND APPROACH WITH GLOBAL COVERAGE

In 2015, Eurovia defined four safety-related Group-wide initiatives: subcontracting; near misses; training and management involvement; and static worksites on in-service roads. These initiatives represent the priorities and have been applied in all of the Group's entities in France and at the international level.

In 2015, Eurovia held its fourth International Safety Day. On May 28, the company's 38,000 employees and temporary and subcontractor staff stopped work and discussed the topic of potential worksite hazards and "near misses," which is central to Eurovia's safety and accident prevention policy.

In France, 84 divisions and sites were rewarded as part of the Eurovia safety challenge. Investment in a three-year safety plan is what allowed these divisions and sites to shrink accident frequency rates to below 5 and severity rates to below 0.5.

— PUTTING INNOVATION TO WORK FOR SAFETY

Every year, the Group introduces safety-related innovations around the world. In 2015, the PREVEN+[1] 3D immersive tool, safety strips on in-service roads[2] (for projects where the client does not grant permission to stop traffic during works), and Stop/Go panel with a built-in camera (designed to prevent motorists from breaching safety barriers at worksites) all received prizes at the VINCI Innovation Awards.

BUILDING

Caraib Moter (Eurovia) and Sogea Martinique (VINCI Construction France) have just completed a design-build project for a reserved-lane public transit system in Martinique (French West Indies) as part of a partnership contract entrusted to Caraibus, a subsidiary of VINCI Concessions. In all, 400 men and women worked on this successful mandate, from the signing of the contract in November 2013 to delivery of the project in October 2015.

Every project is a commitment to local residents.

— BUILDING
FOR EUROVIA,
THIS MEANS...

...mobilizing multiple business lines and combining established know-how and innovative practices to design and creating infrastructure that enables the free flow of people and goods. We build in partnership with local communities, working closely with them on a daily basis over the long term.

— FROM THE DESIGN TO THE CONSTRUCTION AND THE MAINTENANCE OF TRANSPORT INFRASTRUCTURE

Eurovia consolidates its presence in the United States, where its integrated business model – design, production, earthworks, road construction, and civil engineering – has opened doors. Atlanta's Northwest Corridor ①, which is a design-build project, is in full swing.
In France, despite work stoppage in winter, the A63 widening scheme in the Basque region was delivered on time thanks to optimized work methods.

- **Canada** - Marine infrastructure at Deltaport
- **Slovakia** - Reconstruction of the Old Bridge in Bratislava ②
- **France** - Renovation of taxiways at Toulouse-Blagnac airport

— FOSTERING ECONOMIC COMPETITIVENESS AND STRENGTHENING SOCIAL BONDS

As part of a consortium of VINCI companies, Eurovia completed earthworks, roadworks, and developments in the area around Matmut Atlantique stadium (Bordeaux), a new-generation multifunctional sports facility that was opened in May 2015. The stadium will host five matches as part of Euro 2016.
In the United States, Eurovia used its expertise to bear on four projects in Florida designed to upgrade thoroughfares to meet increases in traffic volume.

- **France** - LGV SEA Tours-Bordeaux ③
- **Chile** - Reconstruction at Taltal
- **Lithuania** - Delivery of the first section of "Rail Baltica"

— DELIVERING MOBILITY AND URBAN DEVELOPMENT SOLUTIONS

Time and time again, Eurovia's teams have shown their ability, on the one hand, to create or renovate prestigious public spaces in various settings, ranging from La Défense in France to Pilsen ④, in the Czech Republic, a European Capital of Culture in 2015, and, on the other, to enhance through advanced civil-engineering skill sets the quality and performance of major industrial, logistical, and power-generating facilities.

- **Germany** - Two worksites at the foot of the Cologne Cathedral
- **United Kingdom** - Construction of the track for the Race of Champions ⑤, which was held in London in November 2015
- **France** - Construction of maturing cellars in Cognac


④

See the time-lapse video of the Queen Elizabeth Olympic Park Stadium transformed into a race track.


⑤

KEY FIGURES

37,000
WORKSITES EVERY YEAR

6,000+
MACHINERY AND EQUIPMENT

300
DESIGN OFFICES FOR PROJECT DESIGN

304
ROAD AND RAIL WORKS DIVISIONS

IN FACTS

NEW-GENERATION INFRASTRUCTURE

Eurovia's full-service offer was on display on the new section of motorway D3 between Strážov and Brodno in Slovakia. Prior to new lane construction, the teams carried out drainage works, built a tunnel, three flyovers and a supporting road network, and installed motorway equipment. During the design phase (before work began), the teams devised the most optimal approach to carry out their tasks on site.

4.2
KM OF ROADWAY

500
EMPLOYEES MOBILIZED OVER 3 YEARS

What's your **next move**?

SUCCESSFULL SYNERGIES IN NORTH AMERICA

Thanks to Eurovia's local presence through Carmacks, its subsidiary in the neighbouring province of Alberta, VINCI was able to win a €1,000 million contract to finance, design, build, operate, and maintain for a period of 30 years a dual 2-lane bypass in Regina, the capital city of Saskatchewan in Canada. The bypass is 61 km long, including 37 km of new construction and 24 km of renovation.
This is the province's largest ever infrastructure project, and it will be completed in record time.

What is Eurovia's development strategy for major projects in North America?

Paul-Gilles Parodi Major and complex projects are a priority for Eurovia, including public-private partnership (P3) and design-build projects. Our Group is advantageously positioned for these types of mandates: by targeting opportunities in proximity to our local operations, we can leverage our in-depth knowledge of local realities. Potential synergies with other VINCI business lines is something our clients also appreciate; they enhance our competitive edge and operational excellence, thereby reducing risk and ensuring overall project profitability. ●

Paul-Gilles Parodi,
Vice-President,
Major Projects
Development,
Hubbard (Eurovia)

Luis Palazzi,
Director, VINCI Concessions, Americas

Are P3 projects appropriate for major infrastructure needs?

Luis Palazzi At a time when public funding is drying up and projects are becoming increasingly complex, P3 allows communities to entrust the construction and operation of major projects to private operators. These private operators must deliver the work on time and on budget, manage future operating costs, provide maintenance services, and undertake any future major rehabilitation. These factors help ensure that users will receive the expected level of service from new infrastructure over the long term. ●

What VINCI synergies are being applied to the Regina Bypass project?

Bruno Bernet There are many synergies since VINCI Concessions, VINCI Construction Terrassement, and Eurovia (through its subsidiary Carmacks) are all involved on this contract, in addition to two VINCI Construction subsidiaries for vertical drains and reinforced earth walls and VINCI Énergies for smart transport systems. In addition to this wealth of expertise, we carefully deploy our know-how through dialogue and mutual respect in order to create value. ●

Bruno Bernet,
International and Overseas Territories Manager, VINCI Construction Terrassement

MODULOVIA® 4X: AN ASPHALT MIX SUITED TO THE HARSH WEATHER IN CANADA AND THE NORTHERN UNITED STATES

This new high-modulus asphalt mix, the result of research conducted by Eurovia, is both ideally suited for extreme temperatures and economical in natural resources.

In 2015, laboratory studies, carried out as part of a partnership between Eurovia's North American technical centre and its international research centre at Bordeaux-Mérignac in France, led to the development of a new high-modulus surfacing mix: Modulovia® 4X, which combines optimal granular structure with a bituminous binder able to withstand temperatures as low as -35°C, resulting in greater durability. Following tests at several sites over a period of three winters, no defects or thermal fissures were found.

This product's use in the United States is recommended in a report by the National Centre for Asphalt Technology. Modulovia® 4X can also be used to reduce the thickness of the structure, which leads to savings and reduced impact on the environment.
The product won the Grand Prize at the 2015 VINCI Innovation Awards.

MAINTENING

ETF, a subsidiary of Eurovia, is providing maintenance services for a period of 20 years for railway infrastructure, including tracks and catenaries, for Lines 3 and 6 of the metro system in Santiago, Chile. This represents 75 km of electrified tracks and 15 km of tracks for two depots.

Infrastructure is a shared and precious asset. We take care of it over the long term and meet user expectations on a daily basis.

— MAINTENING
FOR EUROVIA,
THIS MEANS...

...providing simple, cost-effective, and ease-to-apply solutions that foster the circular economy through various in-place roadway-recycling techniques, including cold mixes – such as Recyclovia – and warm mixes. Eurovia also provides full-service offers that include diagnostics, works, and even financing.

— CONTRACTS THAT INCREASINGLY EXTEND UPSTREAM AND DOWNSTREAM RESPECTIVELY FROM THE DESIGN AND CONSTRUCTION PHASES

In 2015, as part of contractual agreements, Eurovia provided upkeep and maintenance services for 70,000 km of roadway in various countries in Europe and the Americas. These agreements included purchase-order mandates, design-build-maintain contracts, and public-private partnership (P3) projects. The latter, which cover time frames of 25 to 30 years, are of growing interest to communities that seek partners able to offer financing and infrastructure-management services and guarantee high-quality services for end users[1].

— BEYOND TRADITIONAL UPKEEP AND MAINTENANCE, WE DELIVER INNOVATIVE NETWORK-MANAGEMENT SERVICES

In support of its role as network manager in P3 contracts, Eurovia implements specific and highly responsive problem-detecting and problem-solving tools of all kinds of situation, including weather conditions (winter maintenance, in Canada for example ②), accidents, road deterioration, and waste. In the Borough of Hounslow ③ – in Greater London – incidents and complaints are recorded and investigated by an information system that ensures total traceability. Whenever problems emerge, a control centre informs teams in the field for immediate corrective action.

— SMART COATINGS FOR INFORMED AND EFFECTIVE INFRASTRUCTURE MANAGEMENT

Infrastructure-maintenance contracts with performance stipulations allow the United Kingdom, Spain, Romania, Chile, the United States [4], and perhaps other countries in the future, to optimize the use of resources dedicated to network maintenance. Such contracts benefit from Eurovia's extensive capacity to innovative, especially with regard to infrastructure sustainability and safety. Recent innovations include the Viagrip® smart coating, which enhances skid-resistance, and Smartvia, a system that facilitates road infrastructure management by collecting real-time data, thus quantifying "the health" of the asset [5].

KEY FIGURES

70,000 Km

OF ROADS UNDER MAINTENANCE AND SERVICES CONTRACTS

0.8%

PORTION OF THE GNP OF OECD COUNTRIES DEDICATED TO TRANSPORT INFRASTRUCTURE INVESTMENT*

75%

ESTIMATED VALUE OF FRANCE'S INFRASTRUCTURE AS A PORTION OF ITS GNP**

IN FACTS

ADJUSTING TO ALL ENVIRONMENTS

In northern Chile's desert climate, asphalt mixes are subjected to the extreme heat and high salt content in the air typical of arid zones.

As a result, roadways crack, and the wearing course loses texture. As part of its long-term maintenance contracts, Bitumix, Eurovia's Chilean subsidiary, fills in cracks in the roadway twice a year and replaces the wearing course every five or six years.

12 months

IS, ON AVERAGE, HOW LONG ROAD MARKINGS LAST IN ARID ZONES CHILE

** Source: OCDE.*
*** True depreciated value of national roadways and highways, seaports, airports, and electrical power, water, and telecom networks. Source: McKinsey Global Institute.*

What's your **next move**?

FINANCING COMMUNITY PROJECTS WITH CROWDFUNDING

Collectivity.fr, the France's first crowdfunding platform entirely dedicated to financing public projects, was launched in 2015. The borrowers are communities seeking to build local projects, and the lenders are individuals.

What difficulties do communities encounter these days in terms of investment?

Julien Quistrebert The decline in state and public funding acts as a brake on their capacity to invest. From the borrower's perspective, bank interest rates are low, but this situation won't necessarily last. And small communities are having trouble finding bank financing under €100,000. We estimate that unmet funding needs range from € 2,000 to 4,000 million. As a result, communities are deferring their investment-driven projects, which is unfortunate for their regions and for employment.

Julien Quistrebert,
President of the Collectivity crowdfunding platform for public projects

How is crowdfunding a solution?

J.Q. It provides communities with a new source of significant funding without resorting to banks. This is an approach that should not be dismissed if we keep in mind the 2008 crisis, Dexia, and the communities that suffered due to toxic loans. In this case, lenders invest their savings in well-defined projects probably located in their own region. For the communities involved in this approach, this is a unique opportunity to communicate about their projects and show popular support for it. The crowdfunding process can even be used as a marketing strategy to promote investment in public projects.

Why are you confident in this approach?

J.Q. The main objective is to raise capital beyond the banking sector. With this risk-free product, we are targeting the bulk of the savings market. In addition, our product possesses features that are increasingly sought-after: it is socially responsible and transparent. Some lenders will also be users of the infrastructure whose construction is being funded. That gives us plenty of confidence. Regulations are not yet totally auspicious for the crowdfunding of public projects, but they do not impede it and they are sure to evolve favourably. ●

RD120: A 20-YEAR P3 CONTRACT IN THE CANTAL DEPARTEMENT OF FRANCE

On December 18, 2015, RD120 was opened for service. This new departmental route was built by Eurovia and VINCI Construction Terrassement teams. This project is one of the first public-private partnerships established with a French departmental authority to build a roadway infrastructure.

The new departmental route is closer to motorways A20 and A89. It facilitates the flow of traffic between the Cantal and Corrèze departments with enhanced road-safety conditions. The P3 contract, which was signed in July 2013, spurred the building of the 10-km route in record time, thanks to the more efficient management of construction activities and administrative procedures relating to preventive archeology and environmental protection requirements. The contract covered the financing during works phase, the design, construction and maintenance for a total of €23 million. It provides the community with guaranteed pricing and service levels for a 20-year period.

What's your **next move**?

RAISING THE QUALITY OF PUBLIC SPACES WHILE REDUCING COSTS

The Borough of Hounslow in Greater London has opted for a private-public partnership to renovate and maintain its public spaces for a period of 25 years. The Mayor of Mulhouse stressed the importance of urban maintenance.

Brendon Walsh,
Director, Regeneration, Economic Development and Environment for the London Borough of Hounslow.

What role will public-space quality play in urban regeneration?

Brendon Walsh Real estate players are paying close attention to this. Everything the community does or does not do directly impacts the value of its own investments. In this sense, we were right to call on the private sector. The P3 contract signed with Eurovia, which has already meant an immense improvement in roadways and public lighting, has allowed us to revolutionize our city centres and areas of activity over the past decade.

What do you expect in the future from this partnership?

B.W. That quality remains a priority and that we will not be disappointed. However, we will have to step up our efforts to ensure the same level of service with lower budget resources. I am really counting on the ability of our partners to innovate in terms of techniques, materials, and technologies: we must reduce costs in order to avoid problems in the future. •

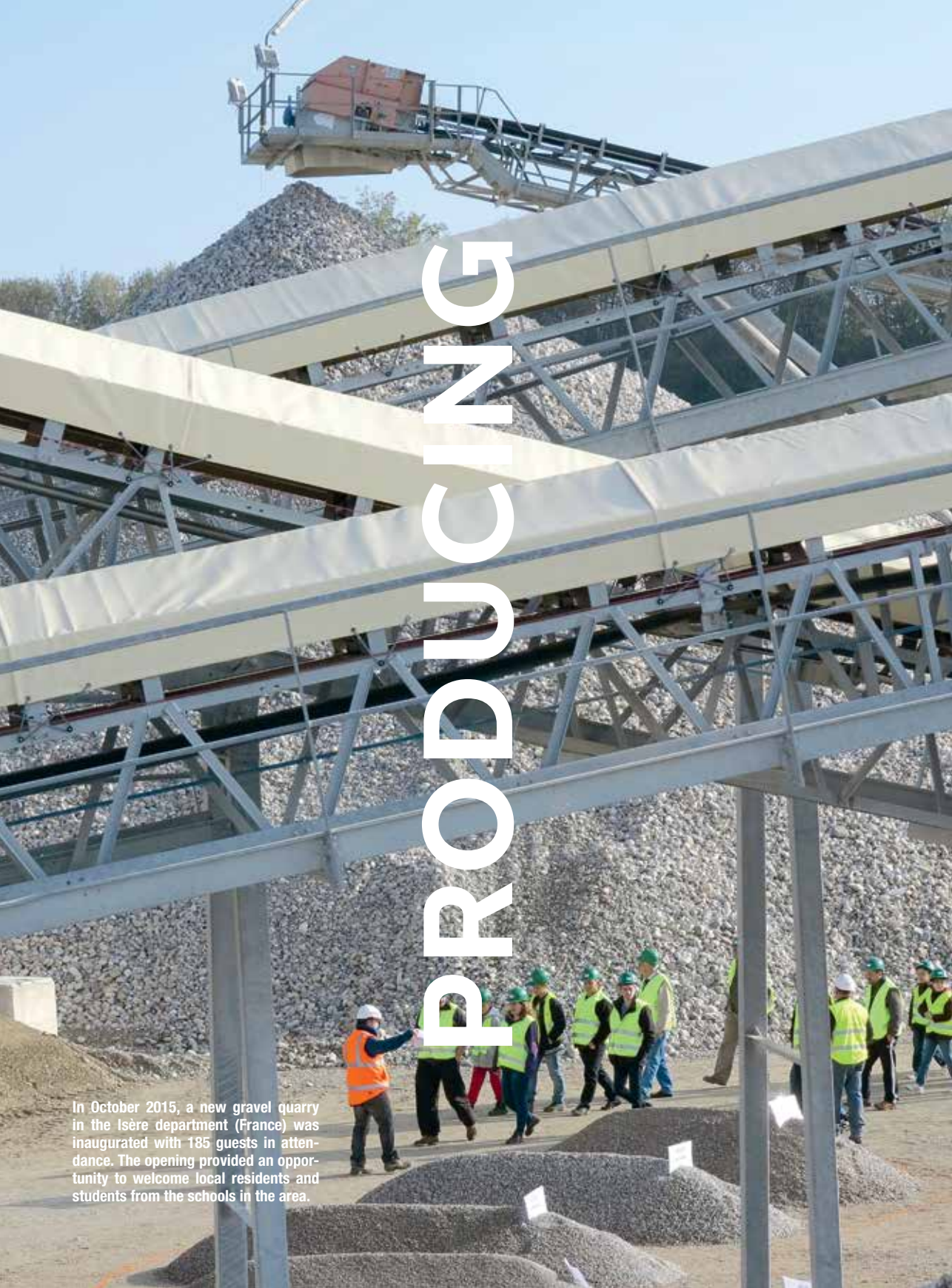
Jean Rottner,
Mayor of Mulhouse
Vice-President, Mulhouse Alsace Agglomération
President, Fédération Nationale
des Agences d'Urbanisme (FNAU)

Why is the implementation of a transport infrastructure maintenance strategy a key issue for communities?

Jean Rottner To ensure a region's power of attraction and its ability to spark innovation and provide a high-quality environment, we must apply an urban optimization economic model that requires us to monitor and control our transport offer and related dedicated infrastructure. It's a matter of responding to energy-related challenges and providing enabling conditions for new urban mobility practices based on smart-city technologies and low-impact, positive-energy transport modes.

In Mulhouse, smart roadways and low-impact and natural infrastructure will soon be developed around a "green diagonal" space in the city centre. To ensure this project's success, I have opted for a maintenance strategy for current structures, which is a more reliable and less costly option that is fully integrated with our long-term vision for development in our city. The multi-year roadway maintenance action plan will require strong political decisions and active partnerships with industry professionals, such as Eurovia. This is about implementing high added value techniques and using new materials in areas facing economic and regulatory constraints. It is up to us to support innovative urban management solutions. ●

PRODUCING



In October 2015, a new gravel quarry in the Isère department (France) was inaugurated with 185 guests in attendance. The opening provided an opportunity to welcome local residents and students from the schools in the area.

We act responsibly in our management of natural resources, biodiversity, and landscaping.

— PRODUCING
FOR EUROVIA,
THIS MEANS...

...ensuring the availability of raw materials to build public utility equipment and infrastructure. It means constantly adjusting our techniques and processes to meet environmental requirements and community expectations. It means recycling to protect natural resources.

— MATERIAL RESOURCES: A MAJOR CHALLENGE WELL UNDER CONTROL

Quarrying is Eurovia's second business line, placing the Company among the European leaders in material production. Access to raw materials has become increasingly complex, and Eurovia works in both directions to meet regional needs: flawless processing at its production sites, on the one hand, and mass recycling of construction materials, on the other, in efforts to value 100% of our resources.

— GRANULAT+ OR HOW TO APPLY THE PRINCIPLES OF THE CIRCULAR ECONOMY TO MATERIALS

On average, Eurovia already uses 15 to 20% of recycled materials and industrial by-products in roadway construction, and up to 60% in some cases.
To promote recycling further, Eurovia collects waste materials and transforms them at its extraction sites. This is the Granulat+ approach, which has allowed quarries to become genuine resources for recycling materials. The increasingly popularity of Granulat+ throughout France earned it a VINCI Innovation Award in 2015.

— MULTIMODAL PLATFORMS STRUCTURED AROUND RAIL AND WATER

As much as possible, Eurovia transports aggregates by water and rail. For long-distance transport, the Company has established material storage, transformation, and sales platforms that use train and waterway transport. This is the case in Gennevilliers and Gonfreville ① (France), and Antwerp (Belgium) – a strategic distribution hub for markets in Northern Europe – and Mietków in Poland.

— CLOSE COOPERATION AMONG LOCAL STAKEHOLDERS

Quarries must meet environmental specifications, which are systematically developed and monitored along with communities ② and local environmental protection associations. In France, quarries use various tools such as *UNICEM's Référentiel de progrès environnemental* (environmental progress framework of the French union of quarry and building materials industries) or ecological quality index designed by the national museum of natural history in Paris ⑨, which is currently in the process of being deployed on Eurovia sites.

KEY FIGURES

400
QUARRIES

328
ASPHALT-PRODUCTION PLANTS

96
INDUSTRIAL DIVISIONS

154
RECYCLING AND RE-PURPOSING FACILITIES

47
BINDER-PRODUCTION PLANTS

Materials can account for up to 40% of infrastructure cost.

Aggregates rank second among the most frequently used resources in the world, after water.

---

80 MT
ANNUAL AGGREGATES PRODUCTION

21 MT
ASPHALT PRODUCTION

700
THOUSAND TONS OF BINDER EVERY YEAR

53
YEARS OF AGGREGATES PRODUCTION RESERVE

10
THE NUMBER OF YEARS NEEDED TO OPEN A QUARRY

What's your **next move**?

ORGANIZING MATERIAL LOGISTICS IN GREATER PARIS

Grand Paris Express subway system, which will be built from 2015 to 2030, is a huge construction project. *Société du Grand Paris* estimates that waste-removal will amount to 43 million tons.
At new rail lines and train stations, countless real estate projects will follow, generating a huge demand for materials.

In what way is material transport a major issue for Grand Paris Express?

Claude Samson The issue is not major... it is critical! *Société du Grand Paris* and the contracting authority STIF both recognize the need to adopt a true logistics organization to limit disruptions stemming from the transport of materials. Failing this, there would be opposition from the public to this transport system, which, nevertheless, is now expected. This is an issue both for society and the environment.

What does AFILOG advocate?

C.S. Railways and waterways must be used as much as possible. It is unfortunate that the most recent tramway lines in the Île-de-France region were not designed for carrying goods or materials to the city centre. However, Ports de Paris is striving to resolve this problem by creating new ports. So, at Vitry-sur-Seine, the port at Ardoines will first be used by the Line 15 project. Later, as planned, it will be used by companies in the area, including a fresh-food wholesaler.

In your opinion, what assets will enable Eurovia to rise to these challenges?

C.S. Given the timeframe and scope of the project, it makes sense to invest in infrastructure designed for the transport of materials, especially since this would result in the development, across Greater Paris as a whole, of a Eurovia-owned logistics framework that would be useful well beyond the projects. Eurovia is an infrastructure specialist, but the Company is also expert in managing project logistics and building public-private partnerships. If there is a company that is in a good position to meet these challenges, it is, without a doubt, Eurovia. •

Claude Samson,
President of AFILOG an association that brings together all trades in the supply chain and logistics real estate.

SELF-SERVICE AGGREGATES

The Mietków quarry ① in Poland sells the majority of its sand and gravel to local clients, who pick it up by truck.

To facilitate loading operations, the quarry created a fully automated "service station." Using a digital badge linked to a sales-management computer system, truck drivers are guided by lighted signs to the silo containing the type of aggregate that they came to pick up. Once the trucks have stopped under the silo at the weighing station, drivers use a remote-control device in the badge to pour the desired quantity of materials into their trailer and drive to the exit to obtain sales documents. There are many benefits to this new system. Productivity has increased from 10 to 36 trucks served per hour. Service is not only quicker, but also safer for both the drivers, who no longer have to leave their vehicles, and for Eurovia employees, who are less exposed to heavy-vehicle traffic.

EQUIPPING

Installing and implementing variable-message panels for Direction interdépartementale des Routes Nord-Ouest near Rouen (France) in summer 2015.

Signage, information, safety, and ease of use enhance the value of transport and urban infrastructure.

— EQUIPPING
FOR EUROVIA,
THIS MEANS...

... enhancing the functionality of infrastructure and public spaces. It means developing urban settings and roadways, improving road safety, and easing traffic flow. Eurovia delivers global and custom solutions that link infrastructure and users.

① Lusail

— ON THE ROAD TO SMART MOBILITY

Equipment supplier Signature Group contributes to many Eurovia roadway and urban-development projects, thereby helping the latter provide clients with a full-service offer. Some of Signature Group's remarkable achievements in 2015 include the dynamic parking guidance system for car parks in the city of Lusail ① (Qatar).
In addition, Signature Group contributes actively to Eurovia's innovation dynamics, for example, the Vega solar-powered station for electric bikes and the Optipark ② fast-parking solution.

Currently, other projects are under study in conjunction with start-ups, which aim to add value to Signature Group's offer through digital and connected systems.
One of Signature Group's strategic areas of development is intelligent transport systems, which already include variable-message panels, dynamic guidance systems, metering stations, and so on.
Signature Group recently launched a research program with several partners to determine how to equip roadways in preparation for the self-driving vehicles of the future.

KEY FIGURES FOR SIGNATURE GROUP

10,000
WORKSITES A YEAR

17
SUBSIDIARIES IN FRANCE AND AROUND THE WORLD

80 COUNTRIES
TO WHICH SIGNATURE GROUP EXPORTS

8
INDUSTRIAL SITES

IN FACTS

EUROVIA'S EQUIPMENT SUPPLIER

Within Eurovia, Signature Group manages 17 companies specializing in 8 complementary fields and employing 1,400 people in 8 countries. Together, they are present in practically all market segments for urban and road equipment. In France, Signature Group also has a network of 30 sites, providing a strong local and national presence. Its proximity to clients allows Signature Group to develop and implement comprehensive solutions that meet their needs.

What's your **next move**?

OFFERING MORE SERVICES BY ENDOWING THE CITY WITH EQUIPMENT

Optifib (a subsidiary of Eurovia) created Optipark, a simple and quick urban parking-management solution.

Benjamin Barataud,
Director of Optifib (Signature Group)

What do communities expect with respect to parking?

Benjamin Barataud Throughout the world, communities are looking for new urban land-use planning approaches by improving traffic flow, building cities upward, and finding new sources of funding. In France, in 2018, comprehensive parking management (rates, payment amounts, recovery, and so on) will be entrusted to mayors. It will be a real revolution, leading to even more needs for monitoring and optimizing public spaces. Cities will want to reduce the impact of these worksites as well as construction and equipment-operation costs.

How does Optipark meet these needs?

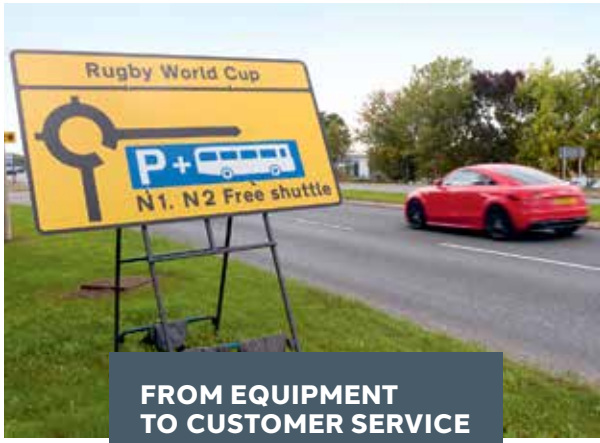
B.B. Each space has a connected post, which detects the arrival of a vehicle and triggers a countdown. It emits a green light signal during the authorized parking time, and then turns red when that time expires. A remote payment option is available. A QR code enables users to see the parking time remaining on their mobile device and easily find their vehicle. Optipark is very easy to install, robust, and customizable according to the community. It makes it easier to control and report in real time on space occupation. This system is simple to deploy, even for small parking areas. •

— A BUSINESS ACCELERATOR WITH OPEN INNOVATION INSTITUTE

The Open Innovation Institute is a Centrale Supélec chair whose purpose is to bring together innovative startups and corporations and provide them with methodological support for developing common projects. Signature Group participates in this business accelerator. The goal is to identify and develop new offerings for smart equipment and urban land-use planning to meet the needs and expectations of customers. Three startups were selected as part of a call for projects launched in the summer of 2015.

- **ECOV** - for its short-distance carpooling service with dedicated areas, destination display, and an application that provides a connection and payment service
- **Akoustic Arts** - for targeted sounds in public spaces, e.g. for visually impaired users
- **Pysae** - for a simple solution for real-time monitoring of bus networks, displays at bus stops, adapted to rural zones.

In 2016, the viability of these projects will be tested, with the common objective of unifying urban equipment, digital applications, and improved user services.



FROM EQUIPMENT TO CUSTOMER SERVICE

Eurosigns, a subsidiary of Eurovia UK Ltd, specialises in customer service through two main activities – signs and lettering – carried out for multiple industries and a variety of customer base.

Initially, Eurosigns produced road signs and panels. Later, the company diversified by creating its RVG brand focusing on vehicle graphics. RVG started with emergency services conspicuity vehicle graphics before branching out into commercial livery and personalized markings. In 2015, Eurosigns provided signage components to the organizers of the Rugby World Cup, held in the United Kingdom. This event enabled the company to consolidate the experience it acquired during the 2012 Olympic Games held in London.

Inaugurated in 2003, Eurovia's international research centre (Mérignac-Bordeaux) is the most recent centre dedicated to road-works. It covers 4,000 m², including 1,900 m² of laboratory space. With its unique equipment in Europe, 250 different tests can be conducted, generating 4,500 tests per year, through its team of 35 researchers. The centre works with a worldwide technical network of 25 laboratories and 650 engineers and technicians.

From the laboratory to the field, from production to maintenance, innovation is the common thread that runs through all our business lines.

— INNOVATING
FOR EUROVIA,
THIS MEANS...

... developing new products and procedures every year that respond quickly to the many expectations of our clients and society. It also means being a leader in finding future mobility solutions.

— FROM DURABLE ROADS TO SMART ROADS: A PATH STUDDED WITH INNOVATION

Eurovia dedicates 65% of its R&D budget to improving sustainable economic development – protecting the natural environment, enhancing safety, and extending the longevity of infrastructure. Another key area of research is future or "fifth-generation" roadways. A tangible example of development is smart roads. With Smartvia (roads) and Smartvia Track (railways), Eurovia is at the leading edge of real-time, digital-sensor-aided collection and processing of information on the behaviour and state of infrastructure.
In 2015, Smartvia Cryo ①, was born, an energy-independent and wireless sensor that is installed via core drilling into existing roads. The information it provides allows for appropriate steps to be taken to prevent road deterioration.

— COLLABORATIVE DYNAMICS FOR EFFECTIVE SHARING

Every year, some 20 R&D projects are launched, most often in partnership with leading schools, universities, institutional players, industries, and start-ups. The research centre and technical network are integrated worldwide, right down to the local divisions. This organization allows ideas to move quickly from testing to industrialization and facilitates the dissemination of innovations.

KEY FIGURES

161
PATENTS BY THE END OF 2015

250
PROJECTS

65%
PROPORTION OF THE R&D BUDGET ALLOCATED TO SUSTAINABLE DEVELOPMENT

€4.5 M
R&D BUDGET

IN FACTS

NOVATHERM: THE POWER-GENERATING ROADWAY

Eurovia has developed Novatherm, a roadway solution that features built-in thermal sensors designed to capture heat energy from two sources, namely, geothermal and solar energy.

A result, in winter, these energy sources can be used as a snow-removal solution (melting snow on the roadway). In summer, this energy can provide heating to nearby infrastructure. In this manner, the roadway acts as an energy-exchanging device with the added benefits of being silent and invisible. Novatherm distinguished itself by earning a VINCI Innovation Award in 2015.

PAPYRUS TOUCH

Papyrus, a Eurovia software that enables worksite supervisors to enter their reports via their tablets, is used in about a dozen countries and provinces. In 2015, Papyrus Touch was launched, a new scalable solution that uses the full potential of touch screen tablets and their connectivity.

What's your **next move**?

OPENING BID FOR TENDERS TO VARIANTS AS A MEANS OF FOSTERING INNOVATION

To bring innovation to public projects, variant bids are increasingly considered a useful tool in competitive tendering to promote innovative approaches designed to deliver enhanced value, thereby reassuring public sector clients. Accordingly, Professor Zander is working on a Franco-German initiative, in which Eurovia is taking part, designed to facilitate the implementation of a European analytical design method.

Should bids for tenders be more open to variants?

Ulf Zander To my mind, feedback from different projects, both innovative and traditional, shows that variety offer a promising route. Openness to new products and processes should enable all project participants to work together on implementing innovative solutions. In spite of all the challenges that this involves, I am convinced that the potential gains are extremely interesting both economically and financially.

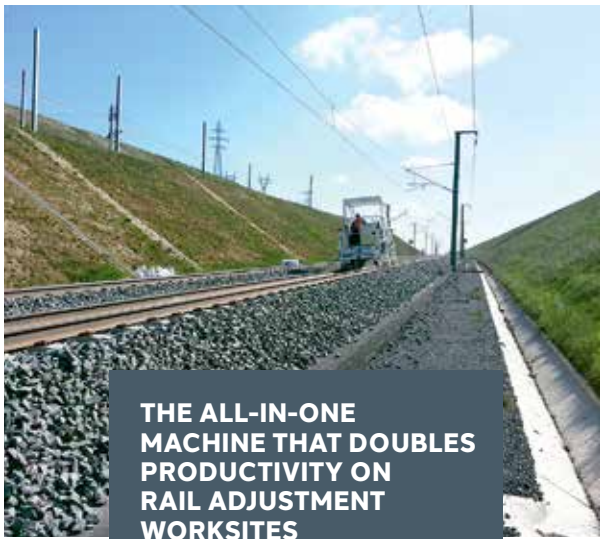
BAST (German Federal Highway Research Institute) and IFSTTAR (French institute for the science and technology of transport, urban development, and networks) are working together on road-structure design. How is this research going?

U.Z. This work, which started several years ago, focuses on the sharing of knowledge and practices and on providing a better understanding of the differences between the two countries. For the purposes of comparison, calculations were performed concurrently using French and German methods. In concrete terms, this involves establishing common positions regarding the use of rational analytical design methods.

Ulf Zander,
Head of Departement "Highway Construction Technology" at "Bundesanstalt für Straßenwesen" (Federal Highway Research Institute) in Germany

What future benefits do you expect?

U.Z. I believe that it is high time to replace empirical methods, as used in Germany in road construction, with analytical approaches. It is the only way to rise to the challenges that will emerge in the near future and quickly and effectively benefit from our engineers' enhanced expertise. At the same time, we will have to improve quality management and construction methods.
The joint efforts of administrative bodies, industry, and specialized research institutes will then encourage the development of methods for building sustainable, high-quality roads, thus contributing to the increased availability of road infrastructure. ●



THE ALL-IN-ONE MACHINE THAT DOUBLES PRODUCTIVITY ON RAIL ADJUSTMENT WORKSITES

Since the 1970s, the SNCF has been using the continuous welded rail (CWR) technique for building and remplacing tracks in its network.
Once laid, these rails must be adjusted to avoid buckling due to temperature variations. This highly technical operation, known as rail destressing, requires a sizeable work team and 10 or so machines weighing up to 350 kg. ETF (Eurovia) developed an alternative solution that is a truly ground-breaking innovation in this respect: a self-propelling multi-function destressing trolley (Clam). This five-ton machine integrates all tools and automated systems needed to continuously run a destressing site.
It is driven by an onboard operator using joysticks and tactile screens.
It is equipped with a radio-controlled function for shunting the machine on a side track without human intervention.

SUSTAINING

Since 2010, Carrières et ballastières de Normandie (Eurovia) has restored the natural environment of its gravel quarry in Yville-sur-Seine (Normandy, France). This initiative has already helped to restore wet grasslands on 6 ha of the ballast pits. An additional 25 ha will be restored in 2016.

Our techniques and processes are constantly developing to provide better protection to resources, and the environment.

— SUSTAINING
FOR EUROVIA,
THIS MEANS...

...reconciling economic activities with protecting, natural resources, and the environment. It means bringing together employees, partners, and local residents in a constant process of innovation and progress, in all of the Group's business lines.

1

— SUSTAINABLE DEVELOPMENT, THE GUIDING THEME FOR INNOVATION

Eurovia's highly integrated organization fosters the dissemination of a strong sustainable development culture ①**,** made concrete through a stream of constant innovation in terms of technologies, processes, and management. All business lines are involved: roadworks, with the economic use of materials to make roads, for example; maintenance, with the geothermal heating of roads, which does away with winter salting; and aggregate production through the deployment of Granulat+, a process that allows for 100% recovery of resources – natural quarry deposits, and inert worksite waste materials.

— ENVIRONMENTAL EXCELLENCE

In 2015, Eurovia devised an "Environmental Excellence" label. At labelled worksites②, Eurovia is committed to implementing environmentally friendly measures based on the best practice of the sector. The "Environmental Excellence" label sets objectives to reach in five areas in accordance with local conditions: water and soil, greenhouse gases, waste, biodiversity, and relations with local residents.

②


③

— ACCEPTABILITY FOR OUR ACTIVITIES, A MAJOR ISSUE

Project acceptability has led to many managerial innovations, such as these two local cooperative approaches, which won a VINCI Innovation Award in 2015: evaluation by local residents③ close to road-maintenance sites in the Isle of Wight in the United Kingdom – based on dialogue and rules for appropriate interaction between work teams and local residents and stakeholders during the project's operational phase – and restoration of wet grasslands at a gravel pit in Normandy in conjunction with the scientific community.

— BIODIVERSITY: A SUCCESSFUL PARTNERSHIP WITH FRANCE'S NATIONAL MUSEUM OF NATURAL HISTORY

In 2015 in France, the ecological quality index (EQI) for quarries, developed and tested with scientific support from the museum, had a very promising deployment. Starting in 2016, the partnership, which has been renewed for three years, will focus on the environmental quality of worksites[4]. The EQI was tested in six Eurovia quarries before being extended to six additional sites in 2015. This deployment is fostered by EQI training provided to local partners by the museum.

— DESIGNING SUSTAINABLE DEVELOPMENTS

Through its subsidiary Cognac TP, Eurovia has developed eco-friendly engineering expertise[5] to provide environmentally friendly features on infrastructure construction and rehabilitation projects (reroute waterways, apply offsetting measures, develop waterworks, and build wildlife crossings and fish passes) and to restore natural habitats (restore waterways, level or install weirs).

KEY FIGURES

63%

OF OUR PRODUCTION OF AGGREGATES COMES FROM ISO 14001 CERTIFIED QUARRIES

6.1 MT

OF MATERIALS RECYCLED IN 2015

52%

OF QUARRIES IN FRANCE HAVE JOINED FORCES TO CREATE A LOCAL COOPERATION AND MONITORING COMMISSION

30%

OF QUARRIES IN FRANCE ARE INVOLVED IN PARTNERSHIPS WITH LOCAL NATURALISTS

11,162 pieces of data on flora and fauna provided by Eurovia's French quarries to add to the national natural heritage inventory.

79%

OF QUARRIES IN FRANCE USE THE ENVIRONMENTAL PROGRESS REFERENCE TOOL FROM THE UNICEM ENVIRONMENTAL CHARTER

9,693 h

OF ENVIRONMENTAL AWARENESS TRAINING

What's your **next move**?

BIODIVERSITY: A NEW CHALLENGE FOR QUARRY OPERATORS

The "Danger" extraction site in the Vendée region is one of the first sites where the ecological quality index (EQI) was applied. This tool was developed by France's national museum of natural history, and its appropriateness for Eurovia site has been validated. CPIE Sèvre et Bocage (an organization in the Vendée region dedicated to nature conservation and environmental education) was selected to deploy it on this extraction site.

What is EQI?

Laurent Desnouhes It is a tool for evaluating biodiversity that was designed for developed sites. After identifying and counting the species present at a given site, we assign points based on thirteen criteria. These criteria are divided into three groups: diversity, natural heritage – in other words, the presence of rare, threatened or protected species – and function of the site within a broader environmental setting. The results are described in a report with supporting arguments. The report also contains our recommendations with respect to environmental development and management measures.

Laurent Desnouhes,
Ecologist and Director,
CPIE Sèvre et Bocage

Claire Boucheron,
Manager, Environmental Studies and GIS
(CPIE Sèvre et Bocage)

What were the highlights of your collaboration with the site operator?

Laurent Desnouhes et Claire Boucheron First of all, the quarry manager was very involved. It was not just a discussion among environmentalists. Next, our counterparts demonstrated great interest in the results and our recommendations. We felt they were committed to improving their rating! And they can do it since it involves rather simple management steps, including not removing water from wetland areas, leaving old buildings open for owls to nest in, removing invasive species. Ideally, employees would be trained to recognize wildlife and plant species.
Since they're the first to spot them, they'll be even more motivated to respect adequate protective measures if they understand the reasons for doing so. ●

What were the results of the evaluation?

Claire Boucheron The site received a rating of 72/100, which is rather good. And the result for bird conservation, 10 out of 10, was excellent. The diversity of natural habitats and micro-habitats is interesting. Paradoxically, human activities can improve biodiversity in "drastic" environments, such as solid-rock quarries.

ENERGY TRANSITION IS MOVING FORWARD

Eurovia is committed to implementing an ambitious global plan, led by the Equipement department, to save energy in all of its business lines and countries in which it operates.

Many of the selected solutions rely on digital tools.
These tools are built into vehicles or machinery ① and monitor consumption in real time. When used in combination with eco-driving training, they can lead to fuel savings of up to 8%.
These tools also help to optimize the distances covered. Gradual equipment renewal and controlled shutdown of inactive machines at worksites will eventually reduce idling time by up to 50%.
In asphalt-production facilities, employees are trained to save energy. In addition, the deployment of "econometers," showing consumption rates in real time, makes it easier to adjust settings. Other solutions are being defined to reduce energy consumption and losses for each component at our facilities.

4,500,000 Litres
Drop in fuel consumption from 2014 to 2015

13,000 MWH
Drop in total energy consumption (gas and electricity) from 2014 to 2015

16,000 tonnes CO_2 EQ.
Drop in greenhouse gas emissions from 2014 to 2015


tramway
bicycle path
route
highway
MOBILITY
road signs
metro
railway
SOLUTIONS
transport
multimodal
airport
safety
bus rapid transit
mobility
information
infrastructure
seaport
cohabitation
right-of-way
public transport
solutions
drainage
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connections
public space
square
DEVELOPMENT
pavements
village
signage
paving stones
paving
car parks
démolition
services
COMPETITIVENESS
solutions
team
& financing
advantage
& SOCIAL BONDS
maintenance
prospects
upkeep
global management
upkeep
construction
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