En route

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Cover photo: the Athabasca river, Alberta, Canada.
Tribute to Yves François

A pioneering man, ahead of his time, Yves François channeled his talents into the strategic vision he had for the Colas Group: to anticipate and support the company’s growth using the most cutting-edge and powerful information system and technological tools, adapted to the needs of its lines of business.

His faith in innovation, ethics and excellence coupled with his in-depth knowledge of the Group enabled Yves François to build the long-term foundations of Colas’ IT system, which he continuously endeavored to improve. The entire profession was also able to benefit from his visionary approach, as reflected in the success of the Inedi-BTP application and the creation of the Edibuild paperless platform.

Enthusiastic, passionate, resolutely optimistic, positive and kind, Yves was a listener who believed fervently in dialogue. Conscious of the need to support change on the ground, he had an unshakeable determination to liaise constructively between IT and operations to improve reciprocal understanding.

A charismatic leader, Yves François had a heartfelt attachment to his teams. He was generous with his time, offering encouragement to everyone under him, determined to see them flourish personally and progress professionally.

An outstanding networker, Yves was adept at forging authentic relationships. He had an innate sense of conviviality. A natural communicator, he was warm, always jovial and had a laugh to match his sometimes offbeat sense of humor. He was a connoisseur of good wine and thrived on sharing his passion with friends, moments during which he would give free rein to his happy approach to life.

Throughout his battle with his disease, Yves won the admiration of everyone for his strength of character, courage, lucidity and serenity, drawn from his love of life, his family and friends and all those who were lucky enough to meet him.

Yves François was a rare and influential man, who embodied the very best human and ethical values. His open-minded approach, depth of thought and permanent quest for new ideas enriched the spirit of the company and allowed Colas to develop in areas well beyond the IT universe.

Hervé Le Bouc

A graduate of the Ecole nationale des Ponts et Chaussées engineering school, Yves François joined Colas in 1975 as Project Manager. He moved to Speig, the Group’s IT subsidiary in 1978. He was made CEO of Speig in 1986. In 1994, he was appointed Chief Information Officer at Bouygues Telecom, followed by Services and Multimedia Director. He returned to Colas at the start of 2002 as Group CIO and CEO of Speig. Yves François was also president of Edibuild France from 2005 to 2012.
Life is man’s greatest asset. As a responsible company, Colas makes safety its number one challenge, day in and day out, above all else.

Our ambitions are clear: to establish safety as a value that permeates every action of each and every employee, to construct a genuine and sustainable safety culture within the Group, to make the company a benchmark in the field.

The Safety Attitude campaign, launched at the start of 2013, is designed to mobilize every one of Colas’ 63,000 employees around the world – from the CEO to workers – so that they pull together to help achieve these ambitions.

The campaign’s objectives are to make sure employees understand that they have a leading role to play when it comes to their own safety and that of the people around them, and give them the keys to the Safety Attitude, primarily through evolving prevention tools.

And already the arsenal of resources rolled out in the first few months of this major campaign seems to be getting results.

Global Safety Week, held in the spring, was a resounding success, with across-the-board involvement, throughout Colas companies worldwide.

The improved accident frequency rate at the end of August is also encouraging, although it is too early to say whether this is a significant trend, particularly since, where safety is concerned, the battle can never be said to be definitively won.

Safety is a permanent and ongoing combat. Nothing is ever certain and new initiatives have to be developed constantly. In this combat, exemplarity and the personal commitment of managers are crucial.

Once safety has become an automatic day-to-day reflex for every employee, a value profoundly anchored in our corporate culture, the men and women of Colas will be proud to belong to a group that protects life and is recognized as a benchmark when it comes to safety.
From Switzerland to Gabon via Reunion Island, the United States and France...
A rapid trip around the world to see the Group’s jobsites, work in progress and finished projects.

Coletanche®, the impervious bituminous geomembrane developed and manufactured by Axter (Smac) at its Courchelettes plant in northern France, has been chosen to line the new drinking water reservoir under construction in Los Angeles. In May, Axter’s Canadian subsidiary (Axter Coletanche Inc) supplied 28,000 m² of Coletanche® to provide a waterproof, leak-proof lining for the reservoir bed. The company also ensured on-site training for the teams in charge of applying the geomembrane. The second phase of the project, scheduled for January 2015, will involve lining the entire reservoir with this high-performance geomembrane. The main technical challenge is to ensure the same angle of friction for both sides of the product so that it is capable of withstanding earthquakes and soil liquefaction, since California is considered to be a high-risk area for these phenomena. There can be no doubt that this first ever project in the City of Angels will further enhance the already solid reputation enjoyed by Coletanche® in North America.
On the banks of Lake Serre-Ponçon

As part of a road maintenance contract in the Hautes-Alpes region, Colas Midi-Méditerranée’s Gap profit center renovated a 3.5-km section of road running alongside Lake Serre-Ponçon in France’s southern Alps. The techniques used for the project offer significant environmental benefits as Colasmac® cold mix and Valorcol® grave emulsion specially designed with 100% RAP for the occasion.
Two projects in one for Colas Ltd! As a prelude to the main Birmingham Airport runway extension project, the British subsidiary secured the contract – as part of a joint bid with VolkerFitzpatrick – to create a 2-km section of road to divert the A45, the airport’s main access road. Operations on the 4-lane road, launched in July 2012 and completed in the summer of 2013, involved major earthworks, the diversion of water courses, building demolitions (a pub and a service station) and resurfacing work, together with street lighting, the installation of safety barriers, the creation of a surface water drainage system and landscaping. The second phase, one of the most significant economic development projects ever undertaken in the Birmingham area, and the biggest project of the last 20 years at this airport, is the actual runway extension. Work began this summer and is scheduled to be completed in April 2014.
Platform in Lauwin-Planque

Amazon, a world leader in the e-commerce sector, chose the town of Lauwin-Planque, near Douai, in the Nord-Pas-de-Calais region of northern France, as the base for its fourth logistics center in the country. Colas Nord-Picardie secured the contract covering the earthworks, treatment, clean-up and leveling work. More than 50,000 m³ of topsoil was removed, 70,000 m³ of cut and fill treated and 15,000 tons of reclaimed asphalt pavement applied. Despite a particularly lengthy spell of bad weather (frost and snow), the 50 employees involved in the project successfully completed the work on schedule.

Summer nights in southeast France

The French Central-Eastern roads department (DIR-CE) awarded the maintenance contract for the expressway network around Grenoble to Colas Rhône-Alpes Auvergne. The five-year contract sets out a schedule of work covering 5 kilometers of road each summer. In all, teams spent 22 nights out on the road.
Teams from Colas Switzerland carried out resurfacing work on a three-kilometer section of Highway A12, near Gumefens, in the canton of Fribourg. Poor weather meant milling work on the existing surface and the application of asphalt mix had to be done in two stages, in the fall of 2012, and then in May 2013. The entire project was completed at night, with teams working from 7 p.m. to 5 a.m. before reopening the road to traffic from 6 a.m. In June, the subsidiary began renovation work on another ten-kilometer stretch of the same highway.
Aximum bridges the gap

Back in March, following more than three years of work, the pont Jacques Chaban-Delmas, Europe’s biggest drawbridge, was officially opened in Bordeaux by French President, François Hollande. For this project, teams from Aximum's Carbon-Blanc networks and traffic management center laid 935 meters of fiber-optic cables along the bridge and installed 86 new light units. They also built and upgraded 9 intersections with traffic lights around the bridge.
The LGV East Europe high-speed railroad, act II. Eight years after the first platform tests using road base asphalt concrete applied under railway ballast were carried out in eastern France, Colas Est’s Strasbourg profit center secured the contract to supply and apply mixes for a 30-km section of the high-speed railroad currently under construction in the Alsace region. The advantage of using this alternative structural solution is that it cuts the amount of time taken to lay the ballast base and install railroad equipment. A 14-cm layer of road base asphalt concrete will be applied ready to receive ballast on top. The main innovation compared to the trials carried out in 2005 is the use of 30% RAP on a 3-km test section in an experiment designed to reconcile responsible development with cost control. With the support of Colas’ Campus for Science and Techniques (CST), sensors will be installed to measure the behavior of the mixes once traffic is running on the tracks. The results of the experiment will determine whether or not the use of road base asphalt mix with RAP will be extended to future high-speed railroad projects.
FRANCE

Château Pavie: a fine vintage

Since 2011, the Château Pavie estate, a 37-hectare vineyard producing well-known fine vintage wines in the Saint-Émilion region of western France, has been the focus of restoration and development work. Teams from Colas Sud-Ouest’s Gironde Est profit center were brought in for the last phase of the project, which involved building the site access roads to help traffic circulate around the estate. Completed between April and mid-July 2013, the paving work required 2,000 m² of deactivated concrete and 4,000 m² of mix containing white aggregates. This high-quality project is yet another fine reference for the subsidiary, whose expertise is appreciated by a number of “châteaux” in the Bordeaux wine-producing region.

GABON

Lambaréné-bound

As part of the festivities to celebrate the centenary of the Albert-Schweitzer hospital, teams from Colas Gabon carried out reinforcement and widening work on Route 1, linking the country’s capital, Libreville to the city of Lambaréné. The work, which took ten months, concerned a 20-km section of road between the towns of Ntoum and Nsilé and mobilized 120 Colas Gabon employees.
GRTgaz awarded the contract to build two sections of a pipeline linking the future methane terminal in Dunkirk, on the English Channel, to the interconnection point at Cuvilly, in the Oise area of northern France, to a consortium led by Spac. Known as the “Hauts de France II gas corridor”, this new gas pipeline will supplement the current “Hauts de France gas corridor”, in service since 1997. It should be operational by the end of 2015 and will have a capacity of 13 billion cubic meters of gas per year. Work on the pipeline, launched in March 2013, will mobilize up to 380 people. The first 16.7-km section will link the future Loon-Plage methane terminal to Pitgam, in the North, with three crossings using directional drilling. For the second 71.5-km section, between Nédon and Corbie, teams will carry out 15 straight drilling operations and create two micro-tunnels. They will also install five switching stations. Managers at Spac and GRTgaz have signed a safety charter requiring strict compliance with the highest possible safety standards.

FRANCE

Skate park paradise in Blagnac

Colas Sud-Ouest’s Saint-Gaudens profit center has built an outdoor skate park in the Andromède mixed development zone in Blagnac, near Toulouse, in southwestern France. One of the special features of the park, which took three months to complete, is the presence of both bends and inclines. This excellent new facility was opened in June, much to the delight of skateboard, rollerblade, BMX and scooter enthusiasts.
GTOI out to impress

The Saint-Joseph ring road project, in the south of the island, was launched in August 2012 to relieve downtown traffic congestion. GTOI’s teams are in charge of handling the earthworks and civil engineering operations on a one-kilometer section of the road. The project is yet another opportunity for the Reunion Island subsidiary to promote its expertise, especially in the field of major civil engineering structures.
The Moroccan subsidiary GTR develops and employs highly innovative civil engineering techniques in the Kingdom. In this project, for example, it submitted a proposal to the Mohammedia provincial office of infrastructure regarding the building of the country’s first ever pre-cast voussoir bridge with match-cast joints. This technique allows teams to build the deck in successive sections – “voussoirs” – cast in-situ on the ground and then erected on either side of the bridge piles. Each voussoir is interlocked with the previous one and pre-stressed, rendering it self-supporting. GTR has also built three bridges over the wadis Kubar, Cherrat and Yquem, on behalf of the Morocco National Railroads Department, using a specific jacking technique that makes it possible to build the deck in sections on the ground using a fixed station, before moving it using jacks. These impressive structures demonstrate GTR’s capacity to come up with quick and safe industrial solutions.
As part of the project to modernize the Sillon Alpin Sud railroad between Valence and Chambéry, in south-eastern France, RFF (the French National Railroad Network) chose a consortium led by Alstom and involving Colas Rail to design and perform the work required (with integrated project management) on the southern section of the line. On the agenda: the electrification of a 70-km section of track between the towns of Saint-Marcel-lès-Valence and Moirans. The remit includes the construction of a new sub-station (225 kV) at Pérelle to replace the existing 63 kV sub-station (to be dismantled), gauging and safety-enhancement work on three tunnels and four road-bridges, the construction of two rail bridges, including revision of the track, the installation of noise screens and connection of the section to the LGV Méditerranée high-speed network at Valence TGV station. Traffic on the line has been suspended while the work is being completed. A two-month testing phase has been scheduled and RFF plans to re-open the line to traffic in December 2013.
For the very first time in its history and to mark its 100th anniversary, the Tour de France started in Corsica this year. The first stage of the famous cycling race ended in Bastia, on a 1,300-meter cycle lane built specially for the purpose by teams from Société Routière de Haute-Corse (Colas Midi-Méditerranée). The work was carried out at high speed and was quite a challenge given the density of traffic using the road that hosts the track. To make sure the track blends seamlessly into the surrounding landscape, a visually-appealing Colclair® mix was used, incorporating pink Ajaccio gravel. On the day of the race, with spectator safety in mind, Aximum reinforced the wooden safety barriers designed for users of the new "soft transport route" with metal barriers. Once the Tour had gone through, teams set to work again, putting up signs and signals and installing speed bumps.
On April 1, 2013, Colas Ltd set about upgrading and maintaining the principal thoroughfares of central London. Transport for London (TfL) awarded the eight-year contract to a consortium made up of Colas Ltd, VolkerHighways and URS. The contract comprises improvement and maintenance works covering roads, sidewalks, curbs, as well as resurfacing, traffic signs, street lighting, road safety systems, drainage, earthworks, landscaping, bridges and other structures and street furniture. It also involves associated services, such as winter maintenance, emergency call-outs, street cleaning, traffic management, inspections and surveys, as well as other services carried out to coincide with major events such as the London marathon. Yet another success story illustrating Colas Ltd’s expertise in the field of long-term infrastructure maintenance contracts.
Deconstruction work

Following the demolition of the smoke stacks three years ago, the next stage of the dismantling process at the EDF power plant in Ambès, near Bordeaux, is ready to go.

The deconstruction contract was secured in November 2012 by a consortium made up of three Colas Déconstruction entities – Genier-Deforge Grand Ouest (consortium leaders), Brunel Démolition and Ferrari Démolition – and Bouygues Construction Nuclear Services. The work – including asbestos removal, clean-up and demolition – was launched in March 2013 and is set to continue through to April 2014. This unique project is a great opportunity for Colas Déconstruction to show off its expertise, with two controlled blasts scheduled for the coming fall and the spring of 2014.

Tours: a brand new race track

Back in July, the city of Tours in central France hosted a European Nascar stock car race on a genuine speedway. The oval track was created in record time by teams from Colas Centre-Ouest's Tours profit center. One of the distinguishing features of the track is the presence of a 9 degree banking.
A makeover for Marseille

As part of the redevelopment work being carried out in Marseille to mark the city’s position as European Capital of Culture 2013, Colas Midi-Méditerranée's Marseille profit center gave one of the city’s oldest squares - the place des Capucines - a makeover. To restore some of the square's original charm, teams laid 1,500 m² of limestone slabs and paving stones.
Rising to the challenge

In the province of Alberta, Standard General Edmonton, a subsidiary of ColasCanada, has built up a thriving construction materials production business thanks to an unparalleled logistics solution: aggregates extracted from the Windfall gravel pit are shipped by rail to the Acheson asphalt plant 250 kilometers away.
THE WINDFALL GRAVEL PIT
In 2006, Standard General Edmonton (a subsidiary of ColasCanada) signed a long-term renewable contract with the province of Alberta to operate the Windfall gravel pit, 250 kilometers from Edmonton.
On the banks of the Athabasca river, in Alberta, at the foot of the Rocky Mountains, the Windfall site extends over an area of 1,000 hectares surrounded by dense fir forest. The gravel pit was opened by Standard General Edmonton (ColasCanada) in 2007. “When ColasCanada acquired Standard General in 2000, the company wasn’t involved in aggregate production”, recalls Jacques Michel, President of ColasCanada. “But we wanted to control the resources required for our construction projects. We also knew that it was virtually impossible to open a new quarry in the vicinity of Edmonton, due to the difficulties involved in obtaining extraction authorization in this area. So we looked further afield, leading us 250 kilometers to the west, to Windfall, in Woodlands County.” The rock extracted on this site is particularly hard and is an extremely high quality resource.

From Windfall to Acheson

In 2006, the company signed a long-term renewable extraction permit with the government of the province. “Given the distance between Windfall and Edmonton, where our asphalt plants and construction sites were located, we had to work quickly to find an appropriate way of transporting the materials”, continues Jacques Michel. Since the gravel pit was situated close to a railroad, it was decided that the aggregates would be shipped by train, a practice rarely used in Canada up to then. A branch line and loading platform had to be built. The work started in the winter of 2007 and the first train-load of aggregates left the pit in the fall of 2008. The company had also found a site capable of handling the trains from Windfall in Acheson, in the western suburbs of Edmonton. In addition to the new rail link, infrastructures were built for the off-loading and storage of the aggregates. A brand new asphalt plant was also erected. “Thanks to the Windfall pit, we are no longer dependent on the price and volume variations of the local market for the supply of aggregates”, explains Chris Greenwood, >

“What ColasCanada acquired Standard General in 2000, the company wasn’t involved in aggregate production. But since we wanted to secure our own supply source, we decided to become the operator of the Windfall site, 250 kilometers away from Edmonton.”
Jacques Michel, President of ColasCanada
> President of Standard General Edmonton. “We’re also delighted to have created the Acheson site, bringing together various plants: the asphalt plant, bitumen storage tanks, modified bitumen plant, emulsion plant, etc. The location is ideal, with numerous main highways providing easy access.” Finally, in order to set up the organization required for shipping the aggregates by train, “we sought the assistance of experts in the field of rail transport”, continues Chris Greenwood (read portraits below and p. 27).

**THE ACHESON SITE**
Located near Edmonton, the Acheson site, which receives trains from the Windfall gravel pit, houses several facilities including an asphalt plant.

**GARY WALSH,**
Superintendent of the Windfall gravel pit

**Constantly improving processes and installations**
Gary Walsh was present as superintendent of the Windfall gravel pit when it opened in 2007. He had previously spent thirty years as a forestry worker in British Columbia. He is responsible for supervising production and the loading of trains, managing the teams, etc. “There are similarities between the two occupations, especially in terms of processes and infrastructure management”, explains Gary. “But here at Windfall, the main challenge concerns maintenance. We have to be able to carry out repairs as quickly as possible. But the site is quite remote and we sometimes have to wait a day or two before we can begin to get the equipment up and running again. The region is in the middle of an economic boom so people are very busy. We now have someone permanently on site responsible for repairs. That really makes a difference.” Standing 20 meters up, on top of the hopper, Gary Walsh does not tire of talking about the development and the technical changes that have taken place since the opening of the pit. His greatest satisfaction? The mobile conveyor. “We spent two years improving it. Now it’s working perfectly.”

**One trainload of aggregates a day**
Windfall. Early July. Stationed along the edge of the forest, a 98-wagon train 4 kilometers long is being loaded up. The entire site has been specially designed so that the operation can be completed in four hours. Once the rock has been crushed, the aggregates are carried by conveyor belt over 400 meters to the various mounds. Beneath the mounds are tunnels. Vibrating feeders open to allow the aggregates to flow out on to a conveyor belt. After climbing 24 meters, they meet a hopper consisting of two funnels. Weighed to the nearest kilogram, they are then discharged into the wagons.
When fully loaded, the train carries close to 10,000 metric tons of aggregates. Shipping this volume by road would take more than 300 trucks. At the rate of one train a day from April to October, the economic and environmental benefits are substantial. “Less traffic congestion on the roads, less noise pollution and greater fuel savings”, emphasizes Chris Greenwood. “We’ve reduced our carbon footprint by 52%.”

### Climate constraints

Fully laden with aggregates, the train is ready to leave the Windfall pit. Destination Acheson. But it will have to wait for the outside temperature to drop below 25°C. “Given the load weight and the poor state of repair of the tracks, there would be a risk of buckling as the train passes over them,” Weather conditions are a key factor when organizing the shipping of materials. “In October last year, the temperature suddenly plummeted from +10°C to -10°C. The wagons froze almost immediately and the trains couldn’t be unloaded”, recalls Gaétan Marleau, ColasCanada’s Equipment Director. Another factor that needs to be borne in mind is the fact that there are countless wooden bridges along the line, forcing the driver to reduce the train’s speed to 70 km per hour.

### Automated processes

After a journey of more than six hours, the train enters the Acheson site. Thanks to a fully automated process, it takes just four hours to offload the 98 wagons. Under each wagon are three doors through which the aggregates pass, to be transported by conveyors to six different mounds. Then the loaders work quickly to ship them either to the asphalt plant or directly to the trucks.

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**Transporting Aggregates by Train**

Every day, from April to October, a 98-wagon train leaves the Windfall gravel pit headed for Acheson. The route is punctuated by countless wooden bridges.
“At the rate of one train a day, the economic and environmental benefits are substantial.”

Chris Greenwood, President of Standard General Edmonton

- waiting to supply the subsidiary’s construction sites or to sell to third parties. The aggregates from the Windfall pit are not the only materials delivered to Acheson by train. Thanks to its 6,000 meters of railway tracks, the site is capable of simultaneously accommodating another train transporting bitumen. Adjoining the asphalt plant, three tanks with a total capacity of 25,000 m³ are used to store the bitumen, destined for use in asphalt mixes, modified bitumens and emulsions.

Standard General Edmonton also supplies the Conklin site, to the north-east of Edmonton, from Windfall. The region is rich in bituminous sands. Once a week, an 88-wagon train delivers aggregates for use in the construction of plant facilities for the oil industry. “Thanks to the Windfall pit, the Acheson site and the rail transport facilities put in place, Standard General Edmonton has been able to build up a highly successful construction materials production business enabling it to supply its own construction sites as well as the needs of different customers, private and public alike”, concludes Chris Greenwood. An organization that fits squarely with ColasCanada’s vertical integration strategy, with a presence at all stages of the value chain.

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<th><strong>THE WINDFALL GRAVEL PIT</strong></th>
<th><strong>THE ACHESON SITE</strong></th>
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<tr>
<td><strong>10</strong> employees</td>
<td><strong>100</strong> employees</td>
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<td><strong>1,000</strong> hectares of land</td>
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<td><strong>1.3</strong> million metric tons of aggregates transported by train in 2012.</td>
<td><strong>1</strong> asphalt plant (production capacity of 350 metric tons/hour)</td>
</tr>
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<td><strong>1</strong> 98-wagon train, 4 kilometers long, carrying almost 10,000 metric tons of aggregates, leaves the gravel pit each day (from April to October).</td>
<td><strong>3</strong> plants: a modified bitumen plant, an emulsion plant and a thermoplastic paint plant</td>
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<td><strong>4</strong> hours to load a train with aggregates</td>
<td><strong>2</strong> machine maintenance workshops</td>
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<td><strong>1</strong> aggregates offloading, storage and distribution platform</td>
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<td></td>
<td><strong>1</strong> bitumen offloading platform</td>
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<td></td>
<td><strong>3</strong> bitumen storage tanks (total capacity: 25,000 m³)</td>
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<td></td>
<td><strong>1</strong> laboratory (aggregates, bitumens and asphalt mixes)</td>
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REDUCED CARBON FOOTPRINT
A fully loaded 98-wagon train carries close to 10,000 metric tons of aggregates, i.e. the equivalent of 300 truckloads.
Spac's Clichy profit center specializes in the construction, installation and maintenance of electric transmission infrastructures. We take a look at a profession of amazing diversity – from local, small-scale maintenance to major projects –, travelling from Paris to Perpignan, via Tahiti.

Recognized for its expertise in the construction and maintenance of fluid transport pipelines (oil, natural gas, water), Spac, a Colas subsidiary, also boasts considerable know-how in the transmission of electricity. Created in March 2011, in the western Paris suburb of Clichy-la-Garenne, Spac's Clichy profit center installs very high voltage underground lines. *Previously, this activity was carried out by Spac's Fontenay-sous-Bois profit center, alongside its ERDF/GDF natural gas transport and distribution business. In order to separate it out into an operating sector in its own right, the decision was made to establish a dedicated profit center. “We handle the construction, installation and maintenance of electric transmission infrastructures ranging between 63 kV and 400 kV”, explains Hervé Guyot, manager of the profit center. Today, the unit employs 70 people and operates all over France. “Our teams are involved in a variety of projects, including the modernization of existing lines, the construction of new lines or emergency repairs in the event of network shutdowns”, continues Hervé Guyot. “Much of our work is for RTE (the French electricity transmission network operator), cable operators and other industrial players.” Every year, the Clichy profit center completes a dozen or so projects, each one lasting for an average of eight months and worth between €300,000 and €3 million.
In 2012, the profit center installed a 225 kV cable in a service gallery, to supply the Seine electricity substation, north of Paris.
AT THE FOOT OF THE EIFFEL TOWER
Between November 2012 and August 2013, teams from Spac’s Clichy profit center performed the civil engineering works and installed cables to modernize the Harcourt-Montessuy underground electricity network.
We target high-tech projects precisely because we have the required expertise and equipment," adds Hervé Guyot. The keys to success? "Comprehensive upstream preparation, the commitment of all employees – from workers to site managers –, the sharing of know-how and an absolute obsession with safety."

Urban projects

It’s early July and crowds of tourists are filing past, waiting impatiently to climb the Iron Lady. A few meters away, a team from Spac’s Clichy profit center is hard at work. Since November 2012, 26 employees have been carrying out the civil engineering work for the construction of the 63 kV underground network – known as Harcourt-Monttessuy – as well as unwinding and installing the required cables. The aim is to improve the quality of the electrical supply dedicated to the RATP (the Paris city transport authority) by modernizing the 63 kV network feeding the Monttessuy substation, located on the left bank of the Seine. The first stage: creating and opening up the trenches, followed by the reinforcement of the trench walls. The width and depth of the trenches – the decision is made at the design stage of the project – depend on the number and type of cables as well as the method used to install them (see box p. 34). The various elements (support blocks, gutters, HDPE sleeves, etc.) required to accommodate the cables are installed in the second phase. And finally, the service galleries are created and the very high tension cables are installed. To keep traffic disruption to a minimum, backfill operations are carried out as each section is completed.

Technical constraints

Traffic, restricted areas, working deep underground… and all this over a distance of 2.8 km. The Harcourt-Monttessuy project is a perfect illustration of the high-tech nature of projects carried out in an urban environment, as well as the unexpected challenges the profit center’s team often have to deal with. The Paris underground environment often has a lot of surprises up its sleeve. "The earthworks should have been located at a depth of 1.5 meters", recalls foreman Aimé Martial. "In the end, 80% of the earthworks took place at depths of between 4 and 7 meters, due to the sheer density of the existing networks (telecoms, energy distribution, sewers, water, gas, urban heating) that didn't appear on the plans provided. And as you descend further, so the terrain changes. We found ourselves dealing with earth that was much sandier in nature, which forced us to review our timing and operating methods." The other imperatives facing the teams: to minimize traffic disruption during the work, and ensure employee safety at all times.

Major projects

Next we’re off to the south of France. A wide load inches its way through the narrow streets and round the tight bends of the little village of Baixas, near Perpignan. On board, an 85-ton reel bearing the high-voltage cable to be used for the grid connection between Spain and France. A first in Europe, this 400 kV, 76 km high-voltage underground link, running from Baixas (France) to Santa Llogia (Spain), is designed to increase the electricity exchange capacity between the two countries. Since April 2013, a team of five employees from the Clichy profit center have been working as part of a consortium, installing cables over a 34-km section. "This is a unique project for everyone", >
underlines Hervé Guyot. “Cables weighing 38 kilos per meter, 85-ton reels and cables installed in 2,200 meter sections…” In total, 120 km of cables will be installed. Having arrived at its destination, the reel is unloaded and placed on a motorized cradle reel stand. The cables are then installed using a cable pusher and a winch.

Development and outlook
“Le Havre, Nantes, Biscarrosse, Perpignan, Draguignan or Paris… Wherever the construction projects happen to be, our teams are mobile”, underlines Hervé Guyot. “That’s one of the major strengths of our profit center.” In 2011, the profit center took part in the construction of a 16-km section of 63 kV underground power line between the Arue and Papenoo transformer substations. “Our aim now is to develop our activities outside of France”, adds Hervé Guyot. “What’s more, we’re currently bidding for a contract in Gabon.” And for the past year, the profit center has been focusing...
on emergency interventions. The principle: an underground power line breaks down, the profit center is contacted to carry out the necessary civil engineering work and even pull new cable if needed, in order to pave the way for RTE operatives to conduct the subsequent repairs to the cables. “These are high-tech operations, highly profitable for the center”, emphasizes Martial Gonfroy, Assistant Project Manager in charge of developing the activity. “In the space of a year, we’ve managed to double our revenue in this sector.”

85-TON CABLE REEL
120 km of high voltage cable will be installed by Spac Clichy teams for the France-Spain interconnection project.

MARTIAL GONFROY,
Assistant project manager

There’s nothing like a good emergency

Martial Gonfroy joined Spac in 2008. Armed with a high school diploma in civil engineering, he spent three years as an apprentice, learning the techniques and trade of site managers. “When I arrived, I knew nothing at all. My enthusiasm for high voltage work grew through hands-on experience and contact with colleagues who patiently passed on their expertise.” Today, Martial is overseeing two projects in the Paris region, and has specialized in emergency repairs. “The urgent nature of this type of intervention is highly motivating. I thrive on it because it requires a rapid response: the lines are buried and we have to intervene at an early stage to enable the network operator to repair the breakdown.”
Site supervisors, site wardens, technical and laboratory supervisors...
They all do their jobs with enthusiasm and have decided to share their daily routine and projects with us.

Gérard Smigielski got his first taste of the world of asphalt while doing his military service in the air force corps of engineers. During his stint he was involved in a joint project with Colas to carry out runway work at the Luxeuil-Saint-Sauveur air base, in the Haute-Saône region of eastern France. When he got back to civilian life, Gérard contacted Colas again and joined the Group in 1980 as a foreman. He spent a year learning the trade, before heading out onto the roads of his native eastern France accompanied by a team of eight and a mobile asphalt plant. It wasn’t until five years later that he settled down in Besançon. Gérard has worked alongside his teams on a broad range of road and highway construction projects, including some major contracts outside his particular sector. And he has made quite a name for himself in the region on the back of the expertise he has built up along the way. “I was asphalt mix application supervisor for fifteen years before becoming site supervisor. So I’ve got a solid grasp of the subject”, he points out. “But this job is all about teamwork. Knowledge and expertise need to exist at every level and be passed on from generation to generation.”
"Mobility offers a unique experience"

HELENE STEPHAN
FINANCE COORDINATOR
COLAS INC.
UNITED STATES

At just 26 years old, Hélène Stéphan hasn’t wasted any time. Having graduated from Paris-Dauphine University, she joined the Group in 2010 as a financial executive in the international finance division at Echangeur Boulogne. Three years on, she jumped at the chance to change jobs and countries, moving to the United States to take up a position as Finance Coordinator with Colas Inc. Her task is to coordinate and manage cash flow, funding and financial risk issues, provide American subsidiaries with financial support and relay the Group’s strategic objectives. "This mobility offers a unique experience both in terms of the destination and the scope of the post", explains Hélène. “Before I came, I was able to discuss the move with my superiors in France and the United States, which made the decision easier. The added bonus was the fact that I’d become fluent in English." Once she had been over to visit the Colas Inc. head office in Morristown, New Jersey, Hélène made up her mind to go for it. Does she have any advice? "A life-changing move has to be prepared in advance. Get a real feel for the post in question and give yourself time to reflect."
Apprenticeships allow you to acquire expertise

LOIC CUVELIER
APPRENTICE ENGINEER
GTOI
REUNION ISLAND

Loïc Cuvelier was just 10 years old when he realized what he wanted to do with his life. He was entranced by a water transfer project taking place on his native Reunion Island, fascinated by the high-tech nature of the emerging structures and the sheer number of machines operating on the site. He decided then and there that he’d be an engineer. Years later, he enrolled in an engineering and construction school, alternating periods of study with apprenticeships at GTOI. It wasn’t long before the Reunion Island subsidiary offered him a job but the economic slump that followed left Loïc unemployed. So in 2012 he opted to go back to school, joining EI-CESI - renowned for the quality of its combined work/training engineering programs – at its new center on the Island. For the work placement, Loïc turned once again to GTOI and his assessment of the first two years of the new program is extremely positive: “We have the benefit of the experience of our teachers as well as our classmates carrying out work placements in other companies. But, above all, we learn a great deal from our colleagues in the field. Thanks to GTOI, I’ve had the opportunity to work on some interesting projects including the rehabilitation of an oil storage plant – a working site – and the extension of a hydroelectric power plant involving underwater operations. These three years of experience will help me acquire expertise. My dream? To build a bridge for the future coast road… with GTOI!”
"Being given disabled worker status has helped me"

Guillaume Gros
Equipment Planning and Maintenance Supervisor
Aximum France

The son and grandson of a farmer, Guillaume Gros has always loved mechanics. It is a passion that took him to Screg Ile-de-France Normandie (now Colas Ile-de-France Normandie) in 2002, where he was hired as a heavy truck driver before being appointed maintenance and breakdown manager, responsible for a fleet of 150 vehicles, ranging from light vehicles to super heavy trucks. But in July 2012 he suffered a serious accident at work, leaving him unfit for his post. “After the initial shock”, he explains, “I entered a period of soul-searching and concern about my future career. Luckily I had a lot of support and, with the help of the Sameth* and the subsidiary’s Human Resources department, I set about obtaining disabled worker status.” Following a skills assessment, he applied for a position in another of the Group’s subsidiaries, Aximum: “The team welcomed me with open arms and the job I do now is pretty similar to my old one. From my desk, I supervise more than 800 vehicles. I’m in contact with workshop managers and send them control and maintenance schedules. Changing jobs has given me the chance to acquire IT skills. I’ve also gotten my safe driving aptitude certificate for cranes and forklifts as well as a heavy truck license!”

Such determination deserves our admiration.

* Support service to help keep disabled people in employment.
Marina Chalamet’s childhood dream was to build houses in Africa where she lived for ten years with her Cameroon-born mother and her French father. Determined to achieve her ambition, she enrolled in a building and civil engineering course at an engineering school in Lille, where she was first introduced to the job of the engineering laboratory technician. After an end-of-studies internship at Screg Nord-Picardie (now Colas Nord-Picardie), she was hired by the subsidiary and set off on a tour of France. She was bowled over by the sense of conviviality and innovation within the Group, as well as its human values. “I love the contact with all my colleagues on a jobsite”, explains Marina. “Openness to others and adapting to new situations are the common threads running through my career. That’s why I asked to be sent to work overseas.” Her destination was Mayotte. The building projects carried out on the island are a major challenge for Marina: Mayotte became a French overseas department in 2011 and compliance with European standards is now compulsory. “Here I’m getting to know a whole range of new activities, from concrete to buildings. Every day is another opportunity to broaden and hone my skills!”

“Working overseas develops your ability to adapt”
“Team spirit is vital in major projects”

Didier Florance joined the Sucy-en-Brie profit center – now part of Colas Ile-de-France Normandie – in 1985 as a site foreman. He then became assistant site supervisor, site supervisor and principal site supervisor in turn before being promoted to asphalt mix plant manager. He has spent his whole career working with asphalt mixes. Projects of this type demand organization and rigor, two qualities that fit squarely with Didier’s rational approach to life. “Right from the start, I was lucky enough to work on some major contracts, like the renovation of the runways at Charles-de-Gaulle airport in Paris, for instance. The challenge was an extremely stimulating one, but it was also a unique opportunity in my career and genuine recognition of my expertise.” Didier has spent 28 years climbing the ladder, accumulating experience and credibility along the way. Today, with his three teams, he supervises a number of projects, particularly on highways. “Major roadworks need to be completed within extremely tight deadlines. They also have to be carried out at night to avoid disruption to traffic, which is particularly heavy in the Greater Paris region. When you’re working on a site with 90 people and 40 trailer trucks, as well as compacters and planing machines, team spirit is vital and tasks need to have been planned down to the last detail in advance; you don’t take any chances in this line of work!”
Raphaël Chatelet joined Colas Rail as a supervisor in 2009, for work being carried out on the railroad between Bourg-en-Bresse and Bellegarde-sur-Valserine (in the Ain region of eastern France). To help ensure the safety of all the teams working on the project, he was responsible for coordinating the various operations taking place on the tracks and keeping the work trains moving efficiently. In the same year, he was trained in the operation of switches and grade crossings. He was also introduced to an entirely new job: following a series of medical and psychotechnical tests at the start of 2011, he became a site warden. A common feature of all these jobs is the need to be constantly aware of what’s happening around you, to ensure the safety of everyone working on the site. Raphaël is currently working nights on a track replacement project between Angoulême and Bordeaux in western France. His role is to warn teams working on the tracks when a train is about to arrive, so that they can stay clear of danger. Raphaël is also responsible for making sure employees comply with safety procedures and identifying risky situations quickly so that appropriate emergency measures can be taken. “A train travelling at normal speed can suck a man in as it goes past. You have to be vigilant and reactive at all times, even at 3 o’clock in the morning! I work 500 km away from my family. It’s not always easy but it’s a fascinating job.”

**“Safety demands constant vigilance”**
ARIA TERITO
MACHINE OPERATOR
SRS ROADS (SAMI)
AUSTRALIA

Aria Terito is just 27 years old and the only female sprayer operator at Colas in Australia. She learned her trade through various stints spent working for different road construction companies as an apprentice, starting in her native New Zealand and now in Sydney. "In this line of work, people aren’t used to women operating machines", she points out. "But SRS Roads was happy to take me on in 2011." The subsidiary has 12 sprayer teams. Aria’s is based in Sydney, working on projects across the city and throughout the surrounding region. "Luckily, we can go home every evening. The working days – or nights – are long but I enjoy the constant challenge. I get along with my colleagues really well. We’re always finding something to laugh about! They’re almost like a second family. I’ve formed some great friendships over the years", she enthuses.
Frédérick Vanywaede began his working life in a small company as a lathe operator. He then decided to train to work in the petrochemicals industry. In 2008, he joined the Société de la Raffinerie de Dunkerque (SRD) in northern France. In his role as field operator, he is responsible for monitoring the installations and carrying out the adjustments required to keep everything running smoothly. To ensure the continuous production of bitumen, oils and paraffin, round the clock, 7 days a week, he and his colleagues work a three-shift system. “I love being part of a team”, explains Frédérick. “Mutual trust and communication are essential to keep things running smoothly.” As soon as a malfunction is identified, he asks for repairs to be carried out and monitors the work of the service-providers, etc. “I’m also an auxiliary firefighter. In the event of a problem, it’s important to follow safety procedures and stay calm. Since I arrived I’ve only had to deal with minor interventions but I’m always on stand-by. Every week, I review safety procedures and conduct exercises, together with my team firefighter.”
YANN LEFEUVRE  
VMT MANAGER  
COLAS LTD  
UNITED KINGDOM

Armed with a PhD from the Ecole nationale des ponts et chaussées (a prestigious French civil engineering school) on asphalt mix fatigue behavior, Yann Lefeuvre joined the center for expertise and documentation at Colas’ Campus for Science and Techniques as a technical engineer. He spent ten years working with the technical departments of the Group’s subsidiaries in France and elsewhere, sharing his expertise in areas such as pavement design and materials performance, from the bids phase right through to possible litigation. In 2010, Yann joined Colas Ltd, in the UK, to head up the newly created Value Management Team (VMT). The unit is responsible for supporting the development of the British subsidiary’s business towards public-private partnerships (PPP) and other long-term contracts. “For projects of this type, we act as internal consultants to Colas Ltd profit centers and their customers. The objective is to create added value for all stakeholders. For example, for the eight-year contract signed at the end of 2012 with Transport for London (TfL) covering the renovation and maintenance of the city’s streets, VMT is helping profit center and project managers define the work that needs to be undertaken at a particular location and at a given time”, explains Yann. “The great thing about VMT is the complementary nature of the expertise of its 10 members, who come from India, France, Greece, Spain and the UK.”

“Creating added value for all stakeholders”
Safety Attitude

Safety: more than a priority, a value

The 2013 safety campaign is designed to give renewed impetus to Colas’ prevention policy, raising awareness of the importance of having the right Safety Attitude among the Group’s 63,000 employees around the world, from managers to skilled workers. One of the highlights of this year’s campaign was Global Safety Week, held in June. Mobilization on this scale needs to be sustained over the long term in order to firmly establish a genuine “safety culture” within the Group.
“Colas’ ambition, across all its businesses, is to be a reference in every field, beginning with safety.” That was the objective set by Chairman & CEO Hervé Le Bouc as he launched the Group’s safety campaign back in January. While significant improvements have been made within the company over the past fifteen years – the accident frequency rate has been halved on jobsites and road traffic accidents have been cut by 65% in France –, progress appears to have stalled recently. Hence the decision taken by Colas’ management committee on August 27, 2012 to organize a major cross-Group safety campaign, hinged around 13 safety measures (see page 48).

Breaking the “glass ceiling”

“We had reached the end of a cycle”, explains Hugues Decoudun, Prevention, Health and Work Environment Manager. “The prevention tools put in place over the years have proved effective but were no longer enough in themselves to help us make further progress. It became clear that we needed some additional resources to break this ‘glass ceiling’. All the studies carried out, particularly those examining the systems in place in companies with outstanding safety results, led to the same conclusion: it is only possible to break through this ceiling when safety becomes the mantra of each and every employee throughout the hierarchy. It is the role of managers to make safety a constant priority and establish it as a corporate value. It goes without saying that it is also up to managers to lead by example.”

The challenge is the same when it comes to road safety, as Jean-Yves Bignon, Risk and Insurance Manager, explains: “Analyses carried out following accidents — at-fault or otherwise — show us that 80% of them could have been avoided. That’s why our drivers undergo training in safe driving techniques (speed, safety distances, etc.) and are made aware of potential dangers, such as using cell phones at the wheel.”

The personal involvement and exemplary behavior of managers, an automatic reflex for all employees as they go about their daily work: that is the objective of the Safety Attitude campaign, broken down into three phases and implemented across the whole Group throughout the world… The campaign’s English name was chosen because it is understood by everyone and incorporates all facets of the strategy. “The word “safety” is much broader yet more precise in meaning than the French equivalent: it encompasses the notions of prevention and health”, explains Hugues Decoudun.

Awareness-raising

The first phase of the campaign, launched via a video message delivered by Hervé Le Bouc, was aimed at raising awareness among all employees. Two mirror posters were sent out, one aimed at managers – on the front line – and the other aimed at workers in the field. Every employee can see their own

-50%

The objective for 2015: to halve the Group’s workplace accident frequency rate.

80%

of road traffic accidents involving the Group’s vehicles (even non at-fault accidents) are avoidable.
The other aspect of this phase of the campaign is an overhaul of the “toolbox safety talks” initiative. Introduced in 1995, these talks between managers and skilled workers on accident prevention have been replaced by two complementary tools: the Starter and the Safety Meeting. A Starter takes place every morning, or at each change of task, when instructions regarding the day’s work are issued on the jobsite and covers the tasks to be accomplished, the associated general and specific risks and how these can be prevented. Safety Meetings are information meetings organized within an entity or subsidiary. They are held every month or every quarter and cover prevention themes defined and developed by management.

The second phase of the campaign began in May. “Join the movement” is designed to highlight to everyone the fact that safety is a question of global and day-to-day behavior to be routinely adopted (the Safety Attitude). New posters focusing on jobsite safety and road safety were sent out. Global Safety Week ran in all the Group’s subsidiaries from June 10 to 14, with each entity holding events tailored to reflect their particular local situation. All employees took part and managers were fully mobilized in a range of activities including films, workshops, presentations and real-situation exercises, among others. It is clear that Global Safety Week left its mark on everyone (see pages 49 to 51).

Further actions and progress report
From September, the first posters depicting employees from around the globe who have adopted the Safety Attitude were circulated and Hervé Le Bouc reiterated his personal commitment in a video filmed in the field. A system for sharing best practices will also be put in place and a progress report will be drawn up, with subsidiaries ranked according to their safety performance for the first time, the aim being to encourage a spirit of emulation.

Outlook
Other tools are being considered to reinforce the Safety Attitude. “Cross audits conducted in the same country may provide an opportunity to create synergies and disseminate best practices”, believes Hugues Decoudun. “Alongside awareness and training initiatives, we’re going to be reviewing our system of rewards (and sanctions if safety rules are not followed) and incorporating safety results in the calculation of annual managerial bonuses.”

By now everyone should be well aware of one key fact: for Colas, safety isn’t just a priority, it’s a value.
Global Safety Week: a whirlwind tour of initiatives around the world

At Colas Ile-de-France Normandie, each day of Global Safety Week was dedicated to a specific initiative concerning all teams. The hands-on role played by local managerial staff, particularly site supervisors and foremen, was crucial. As Catherine Weiler, Safety Quality Manager, explains, “subsidiary management representatives went out into the field. This was important since it demonstrated the concrete commitment of the highest echelons of the management to the cause of promoting a fundamental message: safety is a value that should never play second fiddle to profitability. I believe it truly created a dynamic, as reflected in the large-scale mobilization of all the entities.” Teams also appreciated the presentation of the Starter, supported by a film made under real conditions faced by the subsidiary. “The Starter isn’t seen as a chore by teams but as something that is positive. Teams are hungry for opportunities for dialogue like this, especially in entities where initiatives of this type have not been routinely implemented in the past.”

Everyone mobilized
In Denmark, the organizers of Global Safety Week focused on promoting the active participation of teams. In one of the four modules held in the week, employees were asked to come up with advice and ideas regarding safety awareness-raising and training initiatives aimed at new recruits. “This approach to harnessing the experience of employees and getting them actively involved was much appreciated by teams”, observes Henning Elkjær Kaas, the subsidiary’s Safety Manager. Concerning road safety, participants were put through their paces when they were asked to reverse through obstacle courses of varying degrees of difficulty. The exercise was organized as a competition, with a winner for each category (machines, trucks, cars). Employees were also set a somewhat unusual challenge: wearing special glasses designed to simulate the consumption of various amounts of alcohol, they had to walk to a car, open the door, sit down and fasten their seat belts…This highly instructive experience also served to remind employees about our extremely strict policy regarding alcohol in the workplace!"

"Here, the greatest risks are related to road safety. Despite recent government measures, roads are still dangerous in Vietnam”, explains Romain Termoz, CEO of ADCo. The Vietnamese subsidiary specializes in the marketing of bitumen. Deliveries are made to customers night and day, seven days a week. So it was entirely logical that Global Safety Week should focus on raising awareness among drivers of the fundamental principles of safe driving. The offices in Hanoi and Ho Chi Minh City focused on the same area, with employees reminded how important it is to wear helmets when riding motor bikes and seat belts when driving vehicles, about the ban on using cell phones at the wheel, etc. For production and storage sites, the focus was on the safety measures to be implemented during bitumen handling operations."
Colas Belgium decided to take all its employees to the Zolder motorsport track as part of its Safety Week events. “This was a first in twenty years, the ideal location to underline the importance of the theme”, recounts Thomas Javaux, Safety-Environment Correspondent. Workshops were held devoted to jobsite safety – led by managers – and road safety – led by outside specialists – but the highlight of the day was the appearance of the Klein Barnum theater company. Adopting a highly realistic approach, the actors staged a series of commonly encountered situations, getting the enthusiastic audience involved. To seal their commitment, participants signed up to a Safety Attitude charter. The first to sign up were Deputy Managing Director, Northern Europe, Frédéric Roussel, and the General Manager of Colas Belgium, Yvo Derdaele.

For Global Safety Week, managers of American subsidiaries went out to jobsites to speak directly to employees, take part in risk assessment meetings and discuss safety practices and procedures. Initiatives implemented by the Group on a global level were also presented. “Every employee needs to be able to see that his/her immediate superior considers safety to be a fundamental value”, insists Christopher Kirby, Risk Manager at Colas Inc. “Since the road construction season was just getting underway, Global Safety Week couldn’t have been better timed. It was an ideal opportunity for management to highlight the importance of the Safety Attitude. Raising awareness of safety procedures and methods to help identify and manage risks is integral to the role of any manager.”
Safety, ergonomics, comfort, quality, modernity, esthetics: these key words define the design of the new line of workwear for Colas employees. The first challenge for the designers in this project was to enhance employee protection and comfort in order to improve their working conditions. To do this, they had to take into account risks relating to health and safety, as well as climatic factors (cold, sun, etc.). The second challenge was to unify and modernize the Group’s clothing identity. Colas’ image with the public will be clearer and the pride and sense of belonging felt by employees should be enhanced. Prior to the creation phase, a number of surveys were conducted on the ground to evaluate the needs and specific characteristics of the Colas various professions. The range of colors selected reflects both the tradition of the industry as well as a group with its focus firmly on the future. The taupe color calls to mind the earth, nature and the Group’s deeply rooted expertise while the contrasting orange color is synonymous with innovation and remains close to the color historically associated with Colas’ core business. The fabrics (organic fair-trade cotton, recycled polyester, etc.) were chosen on the basis of their comfort and resistance to risks, weather conditions and washing. Also, the unisex cuts give a dynamic figure and are equally suitable to the female body shape, reflecting the Group’s determination to recruit more women into its teams. Employees tried out the new range of workwear in real conditions over a six week period, in August and September. Each new model was tested and adjusted if necessary before being approved. The new collection will be launched in France from the first quarter of 2014.
Breast pocket

Flap + Velcro pocket

Contrasting piping

Reflective strip

Adjustable tab + press studs

Dual fastening system: zip + press studs

Mesh pocket + divided pocket

Reflective strip 50 mm

Option: with pockets for knee pads

Logo display Mid-chest
The Colas University 4 program was launched at the start of 2013. The objective: accompany participants in their management roles and foster managerial culture throughout the Group.

The start of 2013 saw the launch of a new Colas University management program. “The objective is to accompany participants in their management roles, giving them the keys they need to understand an increasingly complex environment and be successful in their jobs,” explains Philippe Morvan, Group Training Manager. “The program also sets out to firmly establish the notion of Entrepreneurial - Pioneering & Innovative - Responsible in Colas’ managerial culture, as defined in the context of Colas Horizon 2015.” The training program is split into four sessions spread through the year. On the agenda: practical case studies, personal testimonies presented by managers, group work and workshops, supervised by professors from the HEC business school in Paris, Colas’ training partner. All aspects of a manager’s role are tackled: strategy, administration, communication, sales, management and leadership, etc. “We particularly emphasize the idea of cross-functionality”, continues Philippe Morvan. Participants have to work together to analyze and solve complex management situations. “This training is designed to encourage participants to adopt a Group-wide approach to thinking and enhance their management practices, well aware of the fact that there is no single model governing the field.”
The www.colas-france.fr website was up and running last March. It contains sections common to the seven regional road subsidiaries in mainland France (news, products, etc.) as well as pages specifically dedicated to each company.

Following the reorganization of Colas’ roads business in France, which came into effect on January 1, 2013, a single website, common to the seven regional subsidiaries, went live in March: www.colas-france.fr. In addition to shared sections covering news, activities, products and responsible development, each of the subsidiaries has its own dedicated pages. For example, it is now possible for people to find their closest Colas unit with one simple click, thanks to a geolocation system. The site will shortly be expanded to include new references, a page dedicated to the national subsidiary Colas Major Projects and modules presenting specific activities. The product range pages will also be updated on a regular basis. To enhance the fun/educational area of the “Discovery” section, Colas France organizes half-yearly competitions called “The Road and You”. Participants are asked to post a text, photo, drawing or video to the site illustrating their vision of the road. A jury made up of five of the Group’s employees will select the best submissions, which will then be published on the website and put to the vote of users. Log on now to www.colas-france.fr.
Colas’ cLeanergie project is designed to generate significant energy savings. The Group is thus reinforcing its positioning as an environmentally-responsible company and fostering a competitive advantage.

At the end of 2011, Colas launched the cLeanergie project with the aim of generating significant and sustainable energy savings. The first phase of the project consisted in itemizing energy-related expenditure in order to evaluate the overall bill. And although this process is still ongoing, in 2012, the cLeanergie steering committee launched a second phase to analyze the technical solutions that would enable the Group to improve its energy efficiency in the short term. In 2013, as part of the third phase, subsidiaries and countries are developing tools to quantify their total consumption, setting savings targets and defining action plans to achieve them. The Group’s overall objective is to cut its energy bill by 15% by 2015. In addition, the subsidiaries have access to a cLeanergie relay network to steer the initiative, share good practices and monitor the progress made. An internal communication campaign was launched in July to raise awareness among employees of the importance of this program. With cLeanergie, Colas is reinforcing its positioning as an environmentally-responsible company and fostering a competitive advantage.
Colas Rhône-Alpes Auvergne won an award for its training program on the propagation of invasive species such as Japanese knotweed.

In the 2012 Idrrim* “Infrastructures for mobility and biodiversity” competition, Colas Rhône-Alpes Auvergne won an award in the “awareness and communication with stakeholders, residents and users” category. The award was in recognition of an initiative to promote biodiversity with an impact on the preservation and promotion of natural landscapes. The jury was particularly impressed with the training program set up last year by Colas Rhône-Alpes Auvergne to raise awareness among construction teams from the Albertville profit center relating to the problem of invasive plants. These plants are not just invasive. They can also be highly allergenic (ragweed) or irritating to the skin (giant hogweed). Two sessions, one theoretical and the other practical, were organized in partnership with Crise (the regional information and monitoring center for exotic invasive plants). Having been given the basics in ecology and biology of invasive plants, participants were taught to identify the varieties presented. Good prevention practices were also explained relating to the propagation of Japanese knotweed, a “star” among invasive plants affecting Europe.

* The French Roads and Transport Infrastructure Institute.
Aximum Electronic Products was awarded a nationwide contract in France to supply flashing signs and beacons to signal road works and temporary traffic situations. The specific feature of Aximum’s products is that they are eco-designed.

Aximum banks on **eco-design**

Aximum Electronic Products was awarded a nationwide contract in France to supply flashing signs and beacons to signal road works and temporary traffic situations by Ugap (Union des groupements d’achats publics, the French Central Public Buying Union). The 36-month contract relates to the supply of flashing arrow boards and variable message panels. Aimed at the French interdepartmental roads agencies and local authorities (country commissions, urban communities, etc.), this equipment is designed to protect teams working on the roads and inform motorists of any immediate dangers. The specific feature of the range proposed by Aximum for this contract is that the products are eco-designed. For example, the boards come in solar-powered and wind-powered versions. The advantages of the new range: improved reliability and life expectancy, as well as lighter-weight equipment.
The construction of new green energy production sites requires a significant investment in infrastructures (platforms, access roads, parking lots, etc.). An area in which Colas’ expertise is firmly established in France.

**NEW SOLUTIONS**

**Coming to the aid of the energy sector in France**

The renewable energies sector – wind, solar, bio-energies – continues to grow at a very quick pace, boosted by the liberalization of the energy market, the diversification of the production resources of historic players (EDF, GDF Suez) and the drive to promote the energy transition. The construction of new green energy production sites, such as wind farms, photovoltaic power plants and bio-energy units, has generated significant requirements in terms of investments in infrastructure: platforms, access roads, parking lots, etc. - an area in which the expertise of Colas’ subsidiaries is firmly established in France.

A number of infrastructure construction and development projects are currently underway for wind farms in the Pas-de-Calais, Ardennes, Vienne and Charente regions, for two plants – manufacturing generators and nacelles for offshore wind farms – in Saint-Nazaire (Loire-Atlantique), for photovoltaic power plants in Crucey (Eure-et-Loir) and Bosc (Hérault), and a biomass platform in Forbach (Meurthe-et-Moselle). Each of these projects will further reinforce Colas’ impressive pedigree in this field.
Tours, award ceremonies, sponsorships…
Some images of the Group’s events, in France and around the world.

100 YEARS OF QUARRYING
To celebrate 100 years in business, the Bagnac quarry (Colas Sud-Ouest) in south-western France opened its doors to the public. The only hard rock extraction site linked to the rail network in the Midi-Pyrénées region, it produces 250,000 metric tons of aggregates every year.
GROWING ATTRACTION
Leaping 18 places in 2012, from 71st to 53rd, Colas was the biggest climber in the rankings of the most attractive companies to work for among future French engineers according to the annual Universum survey.

STUDENT SITE VISITS
To introduce future graduates to the sheer diversity of its construction sites in northern France, Colas Nord-Picardie opened its doors to 4th year students from two of the region’s engineering schools: Mines de Douai and HEI.
UNIVERS THE SUN
In March, Pittet-Chatelan (Colas Switzerland) inaugurated its new head office building in Yverdon-les-Bains. Customers and partners alike were able to discover the thermal solar energy system designed to cover 60% of the site’s energy requirements (heating of the buildings and asphalt storage tanks).

ROYAL SPONSORSHIP
In May 2013, the national estate of Chambord, in France’s Loire valley, and Colas signed a long-term skills transfer agreement relating to the renovation and upgrading of the pathways surrounding the château. Teams from Colas Centre-Ouest will use the visually appealing “Heliocol®” mix, first developed in 2010 for the renovation of the pathways at the château de Versailles.
OPERATION OPEN QUARRIES
As part of the program launched by the French national union of quarry and construction-material industries, CMGO Poitou (Colas Centre-Ouest) held an open house day at its granite quarry located in La Peyratte, in the Deux-Sèvres region of western France.

COLAS CZ HONORED
Colas’ Czech subsidiary finished third in the Top Construction Company competition for the quality of its work, in a field that included 25 of the country’s biggest companies. The team was handed the award by the country’s Trade and Industry Minister, Martin Kuba.
Detroit
Colas Circle
Michel Godet
“There is every reason to be optimistic about the future.”

The road through the eyes of…
Freida Pinto
“The road evokes a sense of infinite discovery.”

Colas Life
“On the Road to School”
New mission in Detroit, in the United States.

Colas on stage
Akram Khan
iTMOi revisits The Rite of Spring.

Colas Foundation
Jacob Brostrup
“A road emerges quite naturally from the way the brush moves across a canvas.”

“ON THE ROAD TO SCHOOL” IN THE UNITED STATES
Colas is supporting The Detroit Partnership, an association that provides educational support for children from Detroit’s underprivileged districts.
Economist, professor and author of Good News in France and Good News for the Future’s Conspirators, Michel Godet delivers a message of hope and offers a few of the keys required to approach the future with confidence.

Last year you published Good News in France. At a time when all we hear about is crisis and austerity, is the title not a little provocative?

Michel Godet: The constraints associated with economic globalization and financialization are the same everywhere. Yet unemployment levels vary by a factor of four within Europe. The level in the Netherlands (5%) is half that of France (10%). And even within France itself, similar regional disparities emerge: in the Mayenne (north-west) and Ain (eastern France) regions, and in the town of Cholet in the Vendée area of western France, for example, the unemployment rates are half the national average. Let’s ring the end-of-recess bell, let’s stop blaming globalization and seeking scapegoats. The good news is that the problem lies within us. And we also hold the solutions. The factors that drive regional and corporate development are first and foremost endogenous, principally underpinned by local entrepreneurial dynamics rather than existing natural resources of infrastructures. We have to stop
trying to change France from above through the application of uniform across-the-board measures taking no account of specific local conditions or individual aspirations. There exists an immense — yet little known — pool of good news in France. There is every reason to be optimistic about the future.

Tell us about this good news?
M. G.: People in France forget to look at how far we have come over recent decades. Our living conditions have improved considerably: per capita living standards have increased by 50% since 1980, and life expectancy by 44 years since 1900. The reality of today’s world goes well beyond the dreams of yesterday. While things at the top are not doing so well in France, the country’s regions — the entrepreneurs and innovators — are in pretty good shape. In Good News in France, we’ve assembled eighteen stories designed to encourage readers to live life to the full and conquer the future. These stories portray people whose activities are transforming their environment and entrepreneurs who are innovating and succeeding through risk-taking. They are generally built around projects in which individuals have turned their weaknesses into strengths and, through sheer determination and tenacity, have succeeded, buoyed by enthusiastic support from their family and the local community. They prove that all it takes is a little courage and common sense to put the country back on its feet.

So why do the winds of pessimism continue to blow across France?
M. G.: Too often, instead of being conscious of progress that has been made and happy with what they have, people today worry about what they don’t have. Modern societies have an abundance of assets but few connections. The great thing about difficult periods like this is that it is no longer possible to rise to the challenges without turning to new forms of solidarity and without creating connections. To know where we’re headed, we need to understand ourselves, know who we are and where we come from. We have to work on the famous “know thyself” of the ancient Greeks. To turn our weaknesses into strengths, we have to understand what they are. The good news stories contained in my books often begin with the same desperate situations, in which the inner strength of the individuals concerned, magnified by social connections, can turn crises into hope and transform disabilities into positive differences. Where the majority of problems are concerned, diagnoses and measures to overcome are long since established; what we lack is a set of instructions to make it happen.

You talk about facing “the future with confidence”. How?
M. G.: There is nothing predestined about the future. It has to be built. In order to prepare a plan of action, we have to keep in mind three complementary attitudes: responsiveness — urgent problems always arise that have to be dealt with —, pre-activity — there are things that are due to happen, we have to prepare for them —, and, finally, proactivity, i.e., acting to trigger the desired changes. Just because there are urgent issues to deal with or we know things are due to happen doesn’t mean that we should forget to have a project or plan. A company should always be proactive: be a step ahead of the field in thinking and action. And between anticipation and action comes appropriation. However, there are two traps to avoid. Firstly, a good idea becomes a bad idea if it is imposed. Often the best ideas are not the ones we have or give but the ones we trigger. Secondly, taking decisions that absolutely everyone agrees with are almost certainly the wrong decisions. We have to start by raising the problem again collectively. It’s fundamentally important and takes time.

What are the keys to a successful future?
M. G.: There are five of them, which can be summed up in a single phrase: “man is the only true source of wealth – educated, fulfilled project leaders in a society of confidence”. It is the real people of France, the entrepreneurs and other stakeholders on the ground who experiment and innovate who will pull the country out of the crisis. Innovation is 20% technical and 80% social, organizational, commercial and financial. So we have to listen to our environment and help creators to become entrepreneurs because few creators are entrepreneurs and few entrepreneurs are innovative.
Freida Pinto

“The road evokes a sense of infinite discovery”
The word “road” evokes a sense of “infinite discovery” and in my life I’ve always been intrigued by the road less travelled. There is an awful sense of fear in just thinking it, let alone doing it. What if I fail? Will I be given a second chance?

But there’s no sense in not setting the wheels of discovery in motion. Living by a tried and tested formula is very lucrative but as soon as I fall into that complacency I feel an immense sense of restlessness and uneasiness. Like I am depriving myself of something I could have if I only took that chance.

I think I have always dreamed of the impossible. I couldn’t think of anything realistic. In my head, my life was a fairy tale. I am glad I had those years to dream without inhibition and to believe that those dreams could come true. But it wasn’t the easiest to arrive at the realization that if there’s something you are meant to have, you will.

For everything that you can’t have, there are simply other things to have. It’s all about an altered perception and there’s no harm in looking at failure as a path to a new beginning. After my initial tryst with the monumental success on my first ever project, Slumdog Millionaire, I knew it was only going to get harder. Harder to sustain and harder to stay relevant. It was probably the more difficult path than the one with all the accolades. It took me a while to reach a stage where I could channel my insecurity or dejection into focus and determination to outdo what I lost or imagined what I could have had.

But all of this would not stand the test of time if I didn’t fill myself with spiritual guidance. Whether it’s listening to someone who has wisdom to share, or admiring the first ray of light that paints the morning sky or being grateful for another day I lived. My path is now focused on being a constant seeker but one who worries less, lives fully and dreams fearlessly.

One such road is the discovery of dance in my life. I have to admit; it wasn’t the easiest, not even pleasant at first. It had more hurdles than I imagined. I saw nothing but frustration and failure at first. It made me feel exposed and vulnerable. I was blessed with encouraging, patient and non judgmental teachers. But I still felt insecure and my mind was suggesting a possible dead-end. Until I realized that the biggest challenge on this path would be finally facing myself! This time there was no way to conceal my weaknesses or lie about my shortcomings. If there were one positively strong day the next day would be different and that day would assure you that resting on your laurels was not an option. The only way to keep treading on was to stop fighting it and to embrace it instead. To make the mistakes but then practice ten times harder. To believe and commit to it. One year later I feel like I’ve definitely discovered and unearthed a part of me that makes me feel confident. Confident and strong enough to keep discovering and to face these hurdles again. There is no end unless I give up.

This journey started as a dirt track that became a trail that became a path that became a road that became a freeway that became a universe of endless space where my soul could roam with total abandon.

**Biography**

**A Shining Career**

A native of Mumbai, India, the actress Freida Pinto studied at the University of India. In 2008, she was tapped by director Danny Boyle to play a supporting role in Slumdog Millionaire, a movie that won 8 Oscars, including Best Picture. Pinto herself was nominated as Best Actress in a Supporting Role at the 2009 BAFTA awards. She then appeared in Day of the Falcon by Jean-Jacques Annaud and You Will Meet a Tall Dark Stranger by Woody Allen. In 2012, Freida Pinto decided to take on an entirely new challenge: to embody the role of a dancer in Desert Dancer (2013) directed by Richard Raymond and choreographed by Akram Khan, she embarked upon an entire year of intensive dance training. Freida Pinto is also involved in humanitarian programs in India, such as the Magic Circus, which provides Twins for Peace shoes to children.
“On the Road to School” in the USA

The sixth mission of Colas’ “On the Road to School” corporate solidarity program took place in Detroit, in the United States. Colas is supporting The Detroit Partnership, an association that provides educational support for children from Detroit’s underprivileged districts.
With its miles of deserted streets and abandoned houses, the city of Detroit, in Michigan, is like a ghost town. The cradle of soul music and the American automobile industry, “Motor City”, weakened by successive recessions, is now economically bankrupt and has lost almost half its inhabitants. But the winds of change are beginning to blow through the city. Community gardens, district clean-up programs, mutual cooperation for the insulation of abandoned homes… A whole host of initiatives are springing up, aimed at improving the day-to-day lives of local people and contributing to the city’s revival. The Detroit Partnership (DP), for example, is an organization that gets volunteer students from the University of Michigan to offer educational support to children from underprivileged districts. As part of its “On the Road to School” program, Colas has signed a two-year partnership agreement with the association. One of the main objectives of the partnership is to help the students – based in Ann Arbor – travel around the city. Every year, DP also organizes DP Day, when volunteers go out and clean up various sites around Detroit. For this year’s event, Barrett Paving Materials Michigan, Colas’ American subsidiary, mobilized thirty-five of its employees who volunteered to lend a hand. And an employee from the British subsidiary Colas Ltd went out to Detroit with her 15-year old daughter back in March to witness the work of DP and report back to all of the Group’s employees.

Educational support

4.30 p.m. Ten little girls, between 5 and 10 years old, enter the classroom at the shelter run by Alternatives for girls, an organization that offers support to at-risk young women. On the agenda for the next two hours: snacks and homework. Welcomed and supervised by four DP volunteers, the girls are given one-to-one assistance with their school work and also have an opportunity to discuss a range of issues such as drugs. A few miles away, at Maybury elementary school, a dance session is in full swing. Elizabeth, a DP volunteer for the past three years, is rehearsing a choreography with a group of ten children ready for a performance to be given at the end-of-term recital. Mentoring, educational support, dance classes… The association offers 35 programs a week for up to 1,000 children. “Everyone - children, parents and volunteers alike - benefits from what we do”, explains Kristin Behary, Executive Director at DP. “Everyone learns from each other and this experience will help them in their future life. We know that we won’t change Detroit in a day, but we are proud of the trust we have built up with the community. Our work will help change the city and break down prejudices.”

Spring cleaning

Brightmoor, a north-western suburb of Detroit. Students swarm over the local football field, sporting their school colors, having volunteered to take part in the 14th annual Detroit Partnership Day. Based at 29 sites across Detroit, 1,400 volunteers, including employees from Barrett Paving Materials Michigan, got involved in the event. “It was a first for these employees”, explains John Krispin, Barrett’s regional manager. “And they’re all up for volunteering again next year. It’s extremely important to get involved in the community since we have profit centers nearby and some of our employees live in Detroit.”

Totally committed

The Colas Ltd employee and her daughter spent a week in the city, observing and taking part in various initiatives organized by the association. It was a trip that moved them both profoundly. “We were struck by the energy and passion that drove the people we met”, they enthuse. “Every volunteer is totally committed. The team spirit is incredible. It’s a source of inspiration for us all.” The highlight of this sixth mission: when they met up in Detroit with another Colas patron from Terus Construction, a subsidiary of ColasCanada, who had previously traveled to Croatia with his daughter as part of the “On the Road to School” program. An opportunity to speak about their experiences, compare notes and come to the same conclusion: “The strength of this program lies in the diversity of its missions. When a group like Colas gets involved in programs like this, it encourages employees to give more back to their communities.”

To find out more
www.ontheroadtoschool.com
In 2013, Colas is supporting iTMOi (*in the mind of igor*). Choreographed by Akram Khan, this new piece pays tribute to the Russian composer Igor Stravinsky to coincide with the one hundredth anniversary of his iconic work: *The Rite of Spring*.
Against a backdrop of shadowy light and smoldering incense, eleven dancers make the stage their own. To the rhythm of sacred songs and electric guitars, they combine kathak (Indian dance), hip-hop and contemporary choreographies. Called iTMOi (in the mind of igor), the latest creation of the British-Bangladeshi choreographer and dancer Akram Khan is a highly personal interpretation of Igor Stravinsky’s Rite of Spring. This mystical tale on the theme of sacrifice explores the way in which Stravinsky redefined the codes of musical composition arousing emotions through pattern and rupture.

Breaking with conformity

The Sadler’s Wells Theater in London invited Akram Khan to produce a piece to celebrate the one hundredth anniversary of this legendary work. Quite a challenge. “I started out by distancing myself from any image that would constrain me”, he explains. “It was only then that I was able to focus on what Igor Stravinsky was thinking and do justice to his break with conformity. In The Rite of Spring, Igor revisits his childhood, deconstructs it, untangles the web of memories and brings into being new thinking. Following in his footsteps, I adopted the same approach and discovered an overwhelming desire to create and destroy models. Looking back reveals an irrevocable past. I had to make a clean sweep of my history in order to discover my dark side and allow a world I had yet to explore to emerge. Images alien to my points of reference appeared and I was confronted with my own limits.” The second challenge for Akram Khan was the music. Without using the original music, he turned to contemporary composers Jocelyn Pook, Ben Frost and Nitin Sawhney. Between songs, electronic music, classical instruments and an electric guitar, this new score combines different sound universes, while still using Stravinsky as the model.

Creation at the heart of sponsorship

After Vertical Road (2010) and DESH (2012), Colas is once again supporting the Akram Khan Company. “For Akram Khan and Colas, creating is all about discarding existing models, deconstructing in order to rebuild, remodeling conventions”, explains Hervé Le Bouc. “Today, being entrepreneurial, innovative & pioneering requires us to be bold enough to question the way we do things in order to reinvent our acquired heritage.” First performed in Grenoble in May, the piece has been presented in London and in Paris, at the Théâtre des Champs-Élysées, the venue of the first performance of the original ballet, on May 29, 1913. We’ve come full circle.
roads have been a source of inspiration to you for a long time now. How did you approach this commission from the Colas Foundation?

Jacob Brostrup: I chose a photo of a Parisian street scene because it was particularly important to me that the French public be able to identify the work easily. But I couldn’t begin to tell you which street it is! When I travel about, I take a multitude of photos; I’ve got more than 100,000 images stored on my computer… This painting takes the viewer on a journey through time, one of my favorite topics. Could it be that, at one time, the street depicted in my painting was the forest we can see in the background?

Do you feel that towns and the countryside should be contrasted?

J. B.: I live in an eco-village around twenty miles from Copenhagen. When I arrived in 2000, we were surrounded by fields. But since then, more than 10,000 people have moved in. I can still see a little greenery from my studio but it’s gradually turning into a town joined on to the capital. In the 1970s and 1980s, I lived in a town closer to Copenhagen and the same thing happened. It’s nice to live in the country but at the same time be close to a big town. And that’s what the title of my painting says: when I went to Paris, I saw that the city hadn’t yet swallowed up all the surrounding green areas.

What is the role of the road in life?

J. B.: Here, new subway lines are currently under construction. People are constantly complaining about the noise. But five years from now, when everything is finished, they will be delighted to be able to get from A to B easily. Like food, mobility and infrastructure are essential to life… far more so than art!
acknowledgements
