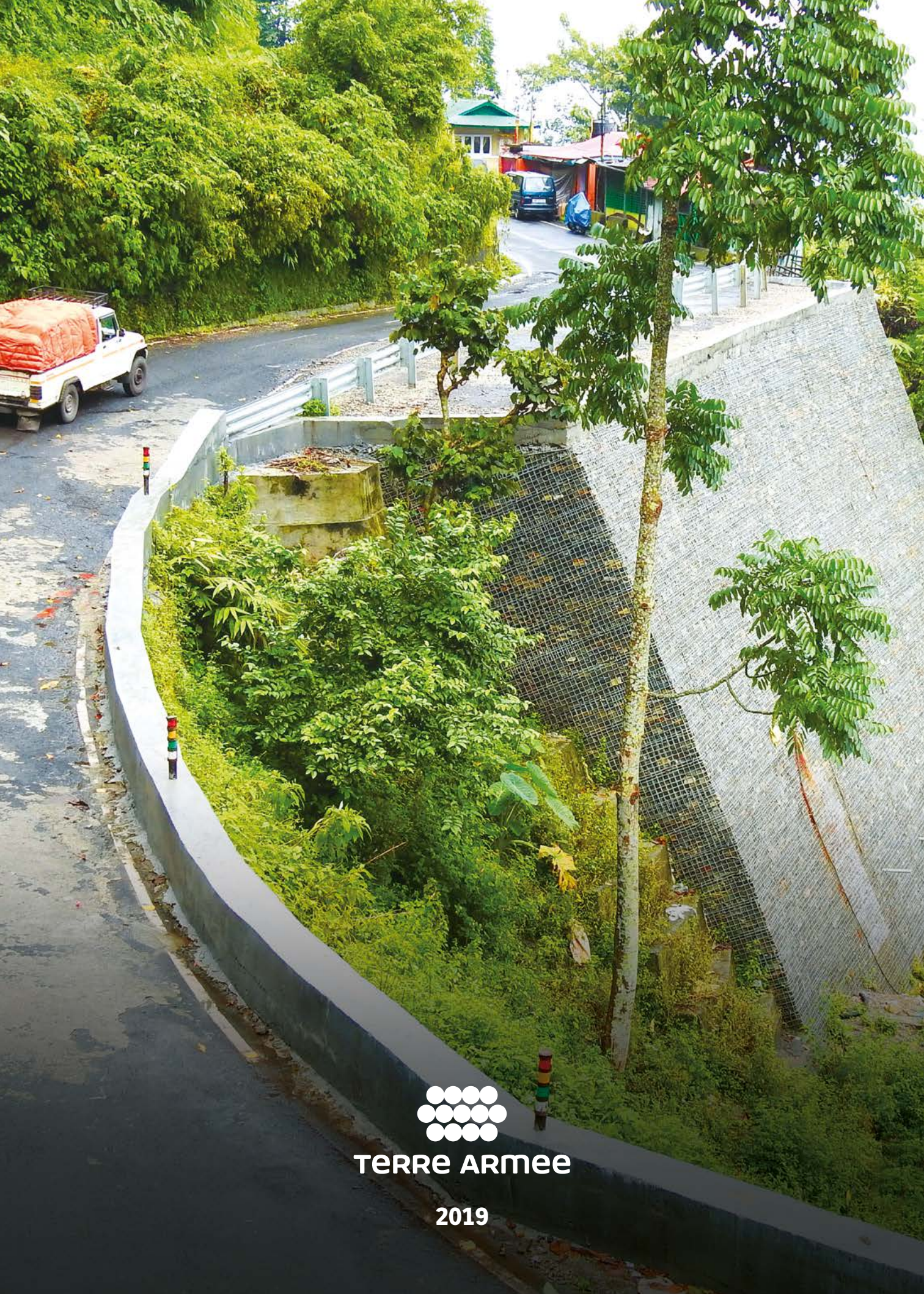


TERRE ARMEE

2019

Foreword

Please note that the content of this Annual Report was created prior to March 2020.

At the time of publication, it is impossible for us to determine the precise consequences of the COVID-19 crisis.

Nevertheless, the pandemic is likely to have a significant impact on Terre Armée's activities, and we anticipate a sharp but temporary decline in sales in 2020.

We are doing everything to bounce back quickly as soon as the health crisis has been brought under control.

Rueil-Malmaison, April 6, 2020

Designers and suppliers of civil engineering solutions that retain, cross, and protect, Terre Armée pioneered the Reinforced Earth® technique. The company has unrivalled experience in the field of reinforced backfill solutions and soil-structure interaction. Our techniques' wide range of applications provide solutions for a variety of markets, including highways, railways, industrial and energy, as well as environmental and water engineering projects.

2019 revenue
212 M€

Employees
972

Main contracts won in 2019

- → **Patreksfjordur avalanche bunds,** Iceland
- → **Geostrap® and geoconnectors supply for Lucknow and Aligarh projects,** India
- → **Geotextile supply for Vadodara Mumbai Expressway,** India
- → **M4 Smart Motorway noise walls,** Australia
- → **Industrial structures for a copper mine in Aktogay,** Kazakhstan
- → **Walls for the California High-Speed Rail,** USA
- → **Prefabricated TechSpan® concrete igloos for the Picatinny Arsenal Explosive Ordnance Disassembly Complex,** USA
- → **MSE Walls for the Cotton Belt Corridor Silver Line Regional Rail Project,** USA
- → **MSE walls for the All Aboard Florida highspeed railway projects,** USA
- → **North-South Trillium Line Extension in Ottawa,** Canada

On cover

Railways

Tindharia, India

To reinforce and rebuild the century-old Darjeeling Himalayan Railway and the adjacent road following a landslide, Terre Armée India proposed a bespoke structural solution using the TerraLink® technique, reducing the amount of backfill compared to the client's initial solution.

Reinforced Earth®, TerraLink®

#makingyourdayeasier

Message from the CEO

Vincent Oudin

As we begin not only a new year but also a new decade, we feel excited about what the future holds.

Looking back on 2019, we worked on impressive projects around the world – among them our largest to date: the I-66 in the US and the very impressive Tindharia project in India.

We also diversified the application of our products –for instance with the use of soil mattresses in the reinforcement of 25 km of the Jia Bharali river banks in India, the use of concrete cubes in the reconstruction and protection of Valparaíso harbour in Chile, or the construction of avalanche protection structures in Iceland.

Meanwhile, we've improved our production capacity with a new precast plant in Florida and reaffirmed our commitment to the North American market with several investments. Thanks to an excellent dynamic in these markets, we ended 2019 with a record backlog.

Finally, last year saw us take us a first step in improved digitalised services with Precastarches.com. Dedicated to our TechSpan® line of products, this platform enables our clients to identify and define their project needs. We have recently launched a new corporate website and plan to further expand our digital offer.

This year, we are excited to start implementing our new strategic plan, which marks a strong orientation towards the themes of soil reinforcement, erosion protection, geosynthetics applications, the diversification of our offer on infrastructures, and a more integrated model at product level.

With this expanded portfolio, we look forward to working on many exciting projects, providing more tailor-made solutions and high-quality service.

> **Thanks to the excellent dynamic of our key markets, we ended 2019 with a record order backlog."**

Governance

From left to right:

Nicolas Freitag
Chief Technical Officer

Laurent Coens
Human Resources Director

Stéphane Beaune
Finance Director

Keith Brabant
Vice President Engineering

Vincent Oudin
Chief Executive Officer

John Shall
Vice President Business Development

Miriam Itzeck
Communications Manager

Philippe Héry
Chief Operations Officer

Somnath Biswas
Zone Manager Asia

Riccardo Musella
Zone Manager Oceania

Missing:
Melissa Berkebile
Zone Manager North America

Railways

New Regional Express Train in Dakar, Senegal

Terre Armée was responsible for the engineering, design, supply, technical assistance, and provision of formwork for 12 Reinforced Earth® access ramps. A total of 17,000 m² of access ramps were built, all made from TerraPlus® rectangular precast concrete facings and GeoStrap® 5 synthetic reinforcing strips.

Reinforced Earth®, TerraPlus®, GeoStrap®

#makingyourdayeasier #fostergrowth

Ports

Valparaíso Harbour, Chile

A mangitude 8.3 earthquake generated waves so powerful that they destroyed parts of the port infrastructure of Valparaíso, Tierra Armada Chile fabricated and supplied 248 precast wall parts with swell deflectors that will act as wave barriers, and 1,600 concrete cubes placed in front of the walls for energy dissipation.

Precast walls, precast concrete cubes

#fostergrowth

Airports

Access ramps, Clark Airport, Philippines

Reinforced Earth Philippines designed, supplied, and fabricated Reinforced Earth® walls as part of construction work for two access ramps. The solution proved quick to build, cost effective and aesthetic. Reusing soil excavated on site, in full compliance with the specifications, generated significant cost savings for the client and dramatically decreased the environmental impact of the project.

Reinforced Earth®

#makingyourdayeasier

Highways

© Work was performed as a subcontractor for FAM Construction on the Transform 66 Outside the Beltway project

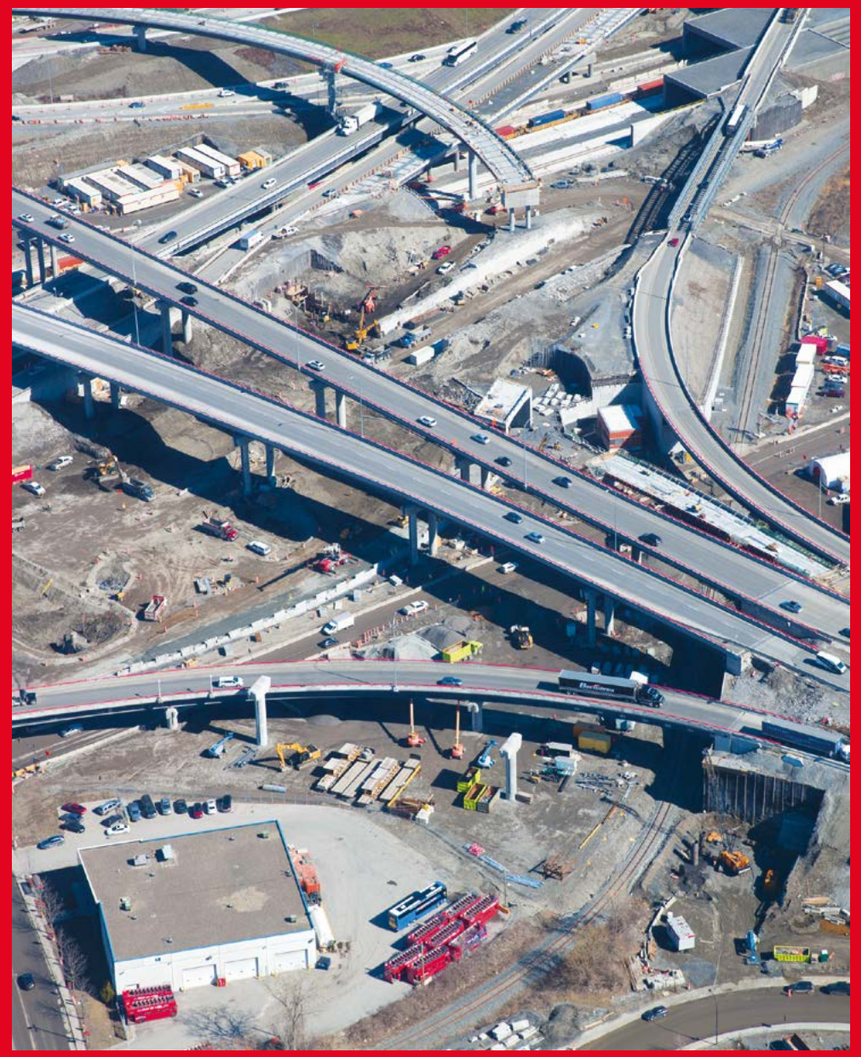
Interstate 66, United States

As part of the Transform 66-Outside the Beltway project, The Reinforced Earth Company USA designed and built 186,000 m² of Reinforced Earth® walls, 4.6 km of coping and 36.6 km of concrete half-connector barriers. This is one of the largest contracts in the history of the Terre Armée.

Reinforced Earth®

#makingyourdayeasier

Highways



Turcot Interchange, Canada

As part of the reconstruction of an interchange that had been in service for nearly 50 years, The Reinforced Earth Company Ltd. Canada designed and supplied approximately 70,000 m^2 of Reinforced Earth® structures which consisted mainly of retaining walls fitted with TerraPlus® rectangular precast concrete facings. Approximately 25,000 m^2 of temporary Reinforced Earth® structures were also designed for traffic diversion purposes.

Reinforced Earth®, TerraPlus®

#makingyourdayeasier

Rivers

Jia Bharali, India

Terre Armée India participates in the Jia Bharali River bank stabilisation project preceeding the construction of a bridge. The project involves TechRevetment® protection works over a length of 25 km and a launching apron of 30 m. This innovative solution is in line with Terre Armée's goal of expanding the range of environmental protection solutions using geosynthetics.

TechRevetment®

#careforall #greenisgreat

Ports

Container Exchange Route, Port of Rotterdam, Netherlands

As part of the construction of the Port of Rotterdam's Container Exchange Route, Terre Armée Benelux built 11 Reinforced Earth® retaining structures for a total surface of 21,000 m² of dark grey TerraPlus® architectural facing panels.

TerraPlus®

#fostergrowth

Highways

Toluca-Naucalpan Highway, Mexico

Tierra Armada de México designed, shipped, and assembled two precast concrete arches for a drainage system. 276 parts 25 to 30 cm thick were required to build the two structures measuring a final 151 metres.

TechSpan®

#makingyourdayeasier

Highways

Transmission Gully Project, New Zealand

Reinforced Earth Ltd Australia was contracted for the design and supply of materials for 11 bridge abutments in a complex environment, due its proximity to the Ohariu Fault and magnitude 7 seismic shocks recorded in the region. The project also included a TechSpan® concrete arch system with extensive associated TerraPlus® Reinforced Earth® walls. The abutments for the 11 single-span bridges required a total of about 8,500 square meters of TerraClass® precast concrete facing panels.

TechSpan®, TerraPlus®, TerraClass®

#makingyourdayeasier

Health campus

Ikitelli Health Campus, Turkey

Reinforced Earth İnşaat Proje ve Tic A.Ş worked on the design, supply, and construction of 34,700 m² of Reinforced Earth® walls fitted with TerraPlus® rectangular precast concrete facings. The company won the project because of its experience with geosynthetic reinforcing strips, which proved to be superior to the initially proposed steel strip solution for this 3-step tiered wall measuring more than, not over 30 m in height.

TerraPlus®, Reinforced Earth®

#careforall

Find out more
www.terre-armee.com

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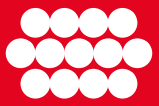

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