



BUREAU
VERITAS

BUILDING AND INFRASTRUCTURE

QUALITY AND SAFETY THROUGHOUT THE LIFECYCLE

SUMMARY

01

About Bureau Veritas

02

Infrastructure Market

03

Our experience by asset



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01

At Bureau Veritas, our mission is to help our clients operate and grow **safely, profitably and sustainably**



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FROM CONFORMITY TO PERFORMANCE

MANAGING RISK

1

Conform to regulation

- Identify applicable regulation
- Assess conformity
- Report QHSE compliance

2

Reduce risks

- Control supply chain
- Perform risk analysis
- Reduce QHSE risk exposure

3

Increase performance

- Recognition through certification
- QHSE services outsourcing
- QHSE function optimisation



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OUR ASSETS

OUR REPUTATION



Efficient International
network

Recognized Technical
expertise

Skilled
employees

Recognized &
Standards Knowledge

Strong Brand &
Reputation built
Over 180 years

Ethics
Independence
& Impartiality

Broad service
portfolio

From standard
Inspection to
Global solutions

First Class
Laboratory
equipment



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BUREAU VERITAS AT A GLANCE

2016 YEAR END FIGURES – REGIONAL BREAKDOWN

€4,55

billion in revenue

69,000

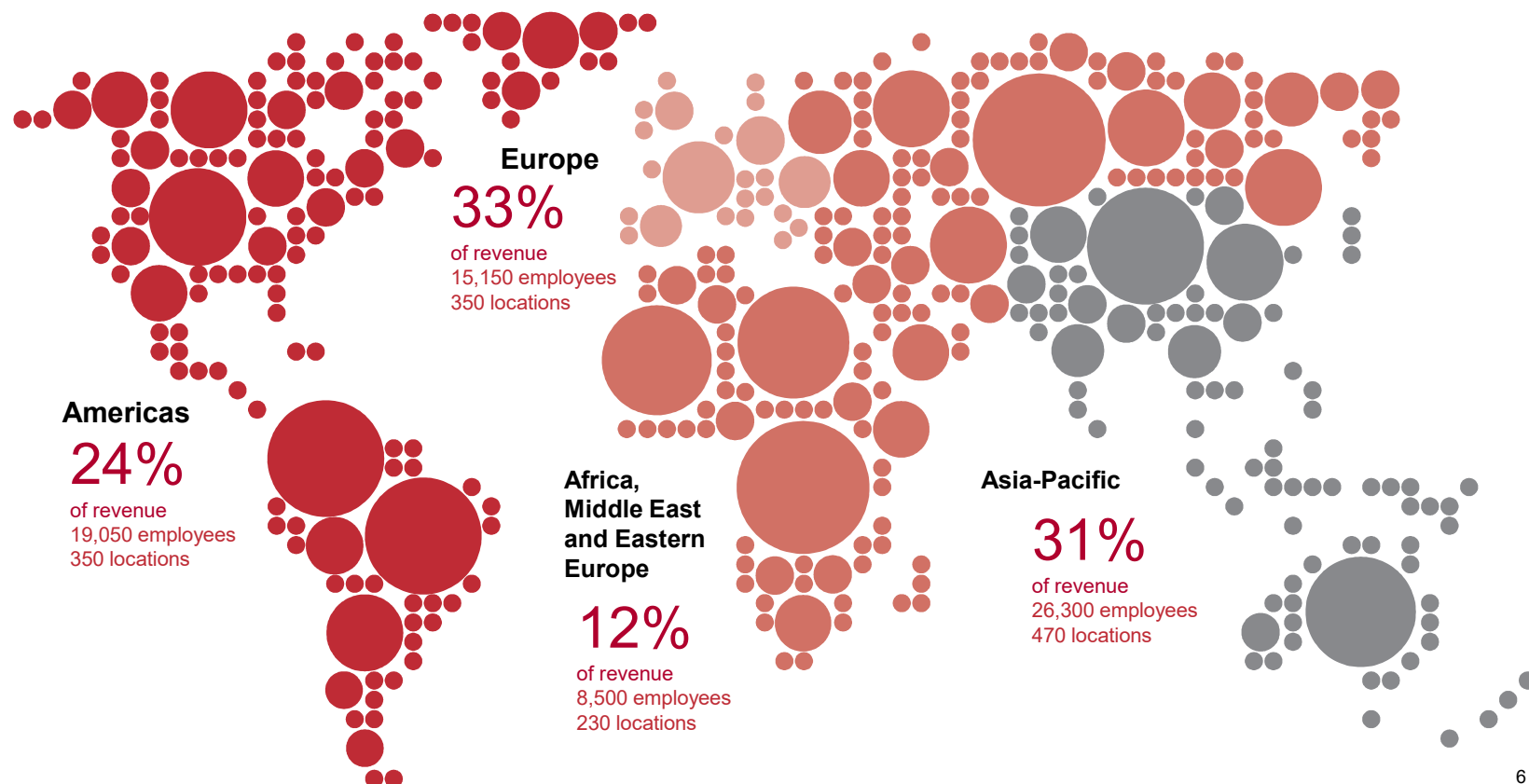
employees

400,000

clients

1,400

offices and laboratories
in 140 countries



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02

Infrastructure Market

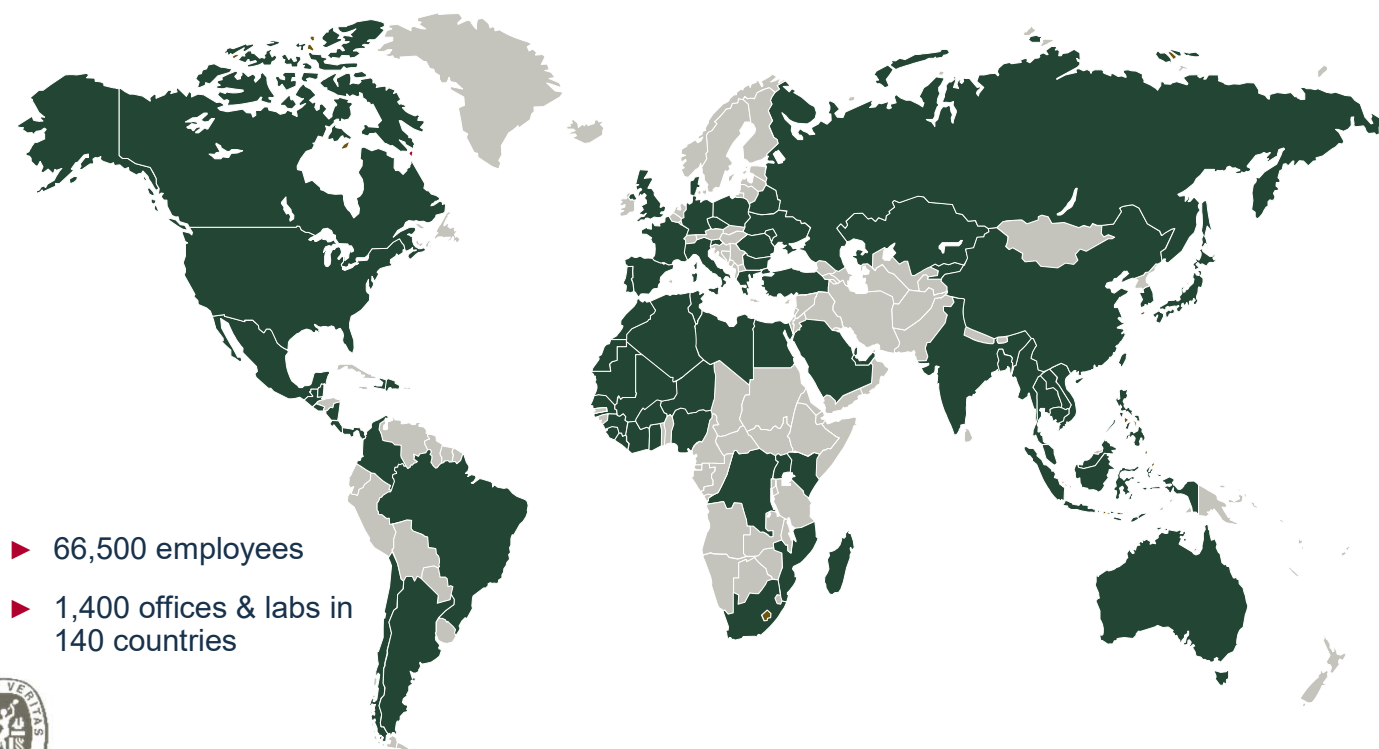


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BUREAU VERITAS GLOBAL PRESENCE

AN EXTENSIVE GEOGRAPHIC FOOTPRINT IN INFRASTRUCTURE



- ▶ 66,500 employees
- ▶ 1,400 offices & labs in 140 countries



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Americas

20,100 employees
330 offices & labs

Europe

14,400 employees
400 offices & labs

Middle East Africa Eastern Europe

9,000 employees
260 offices & labs

Asia Pacific

23,000 employees
410 offices & labs

B&I

500 M euro Turnover
7k dedicated engineers

DESIGN AND CONSTRUCTION

YOUR CHALLENGES

DESIGNED TO BE SAFE

FUTURE RELIABILITY

WITHIN BUDGET

SAFE CONSTRUCTION SITE

TAKES INTO ACCOUNT
FUTURE REQUIREMENTS



“ Bureau Veritas helps improve the **quality and performamnce** of your asset ”



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OUR ADDED VALUE

| ICE: INDEPENDENT CHECKING ENGINEER

VERIFY CONFORMITY

Independent Checking Engineers are suitably qualified, experienced personnel, deployed to client sites to provide **Technical Oversight** of design and construction activities and compliance with requirements.

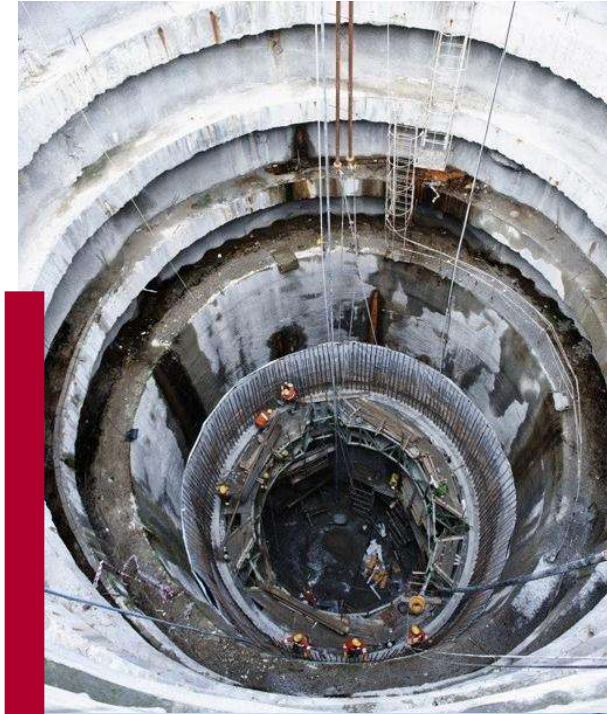
They review **management plans, work processes, tools, software and deliverables.**

Ensure your design conforms to regulations and industry standards



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OUR ADDED VALUE

Construction Monitoring

Project Management and Tech Assistance

BV delivers **project management assistance and construction monitoring services** to manage and monitor the implementation of designs and works

PRI MANGER web-based management tool, allows the full control of the Project and its interaction with the technical procedures necessary to plan.

*Control your cost and
monitor the construction schedule*



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02 OUR SERVICES ALONG THE VALUE CHAIN

FROM DESIGN TO OPERATION



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BV delivers services cover different business needs along projects life cycle

03




Our experience by asset

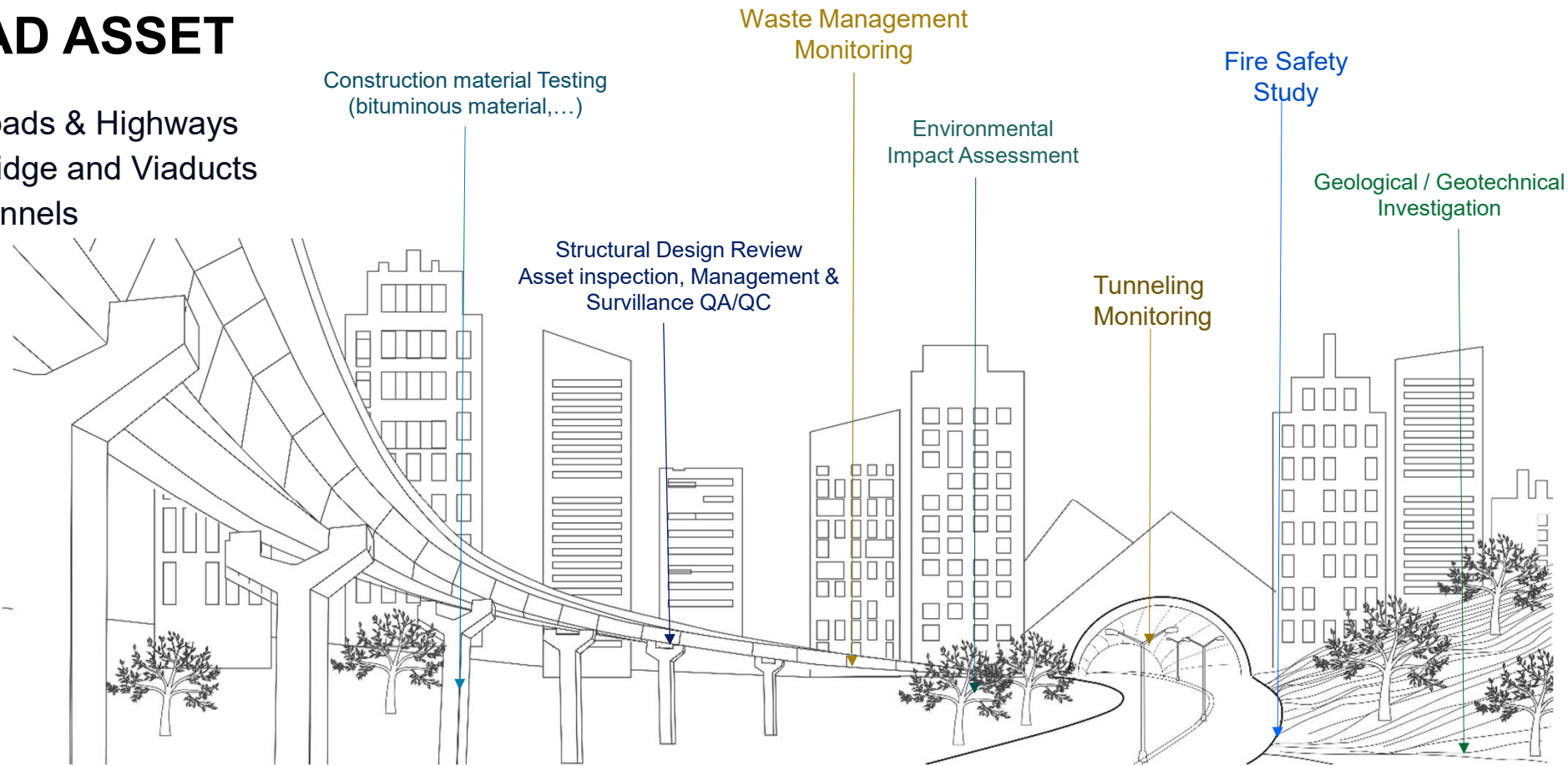


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ROAD ASSET

-  Roads & Highways
-  Bridge and Viaducts
-  Tunnels



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Supervision, Monitoring and Project
Management Assistance

ISO Certification

ROADS & HIGHWAYS



BRT CORRIDOR

PROJECT

Construction of BRT Corridor in Avenue Almirante Barroso & Augusto Montenegro, in Belem. PA, Brazil

CLIENT

Secretaria Municipal de Urbanismo

BUREAU VERITAS ROLE

Supervision, Project Management



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ROADS & HIGHWAYS



EUCLIDES DA CUNHA ROAD

PROJECT

Construction of Euclides da Cunha road, city of Fernandópolis São Paulo, Brazil

CLIENT

DER - Departamento de Estradas de Rodagem

BUREAU VERITAS ROLE

Supervision, Project Management



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2375 k
Euro
Value

ROADS AND HIGHWAYS



PAVEMENT AUDIT WORKS SUPERVISION

PROJECT

Consultancy Pavement Works Services for all roads/Highway in Qatar

CLIENT

ANAS - ASHGHAL

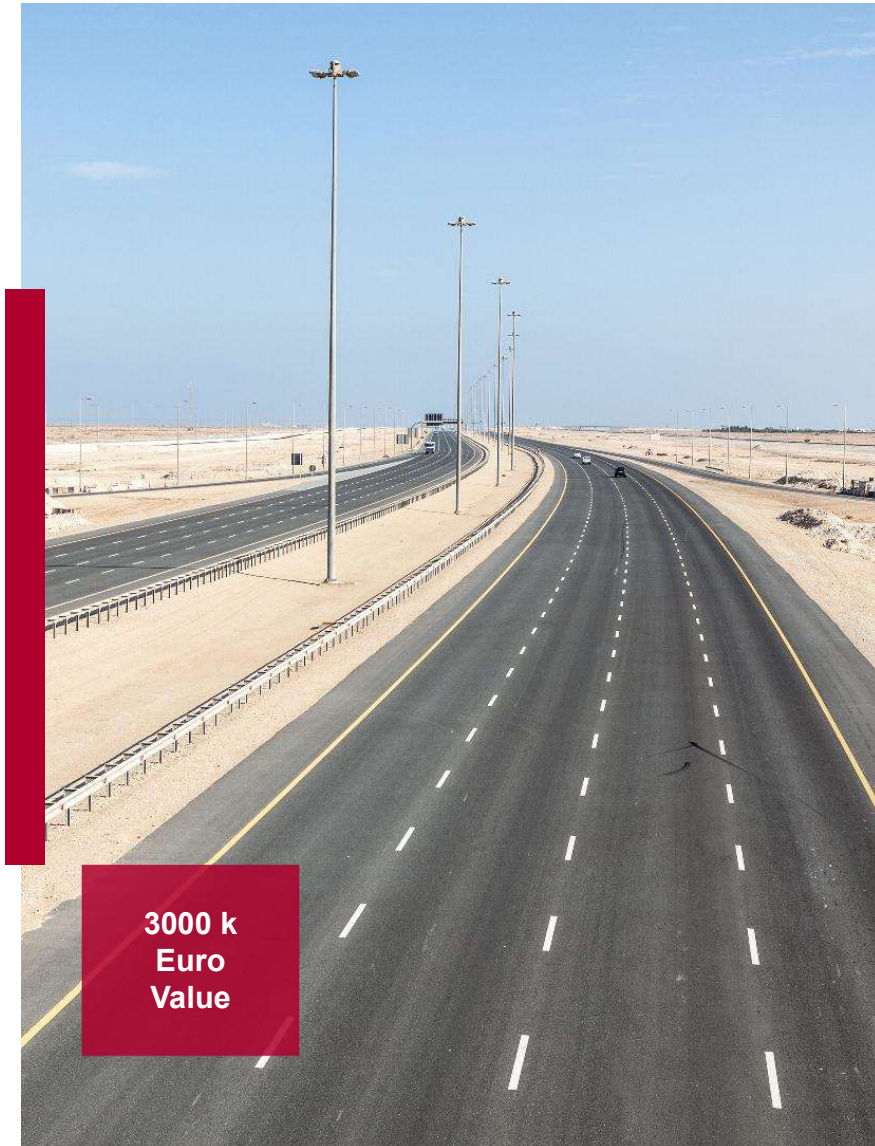
BUREAU VERITAS ROLE

Supervision, Technical Assistance, QA/ QC, PMA



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3000 k
Euro
Value

ROADS AND HIGHWAYS



DAKAR- DIAMNIADIO MOTORWAY

PROJECT

Testing of Dakar- Diamniadio motorway, Senegal West Africa

CLIENT

Eiffage

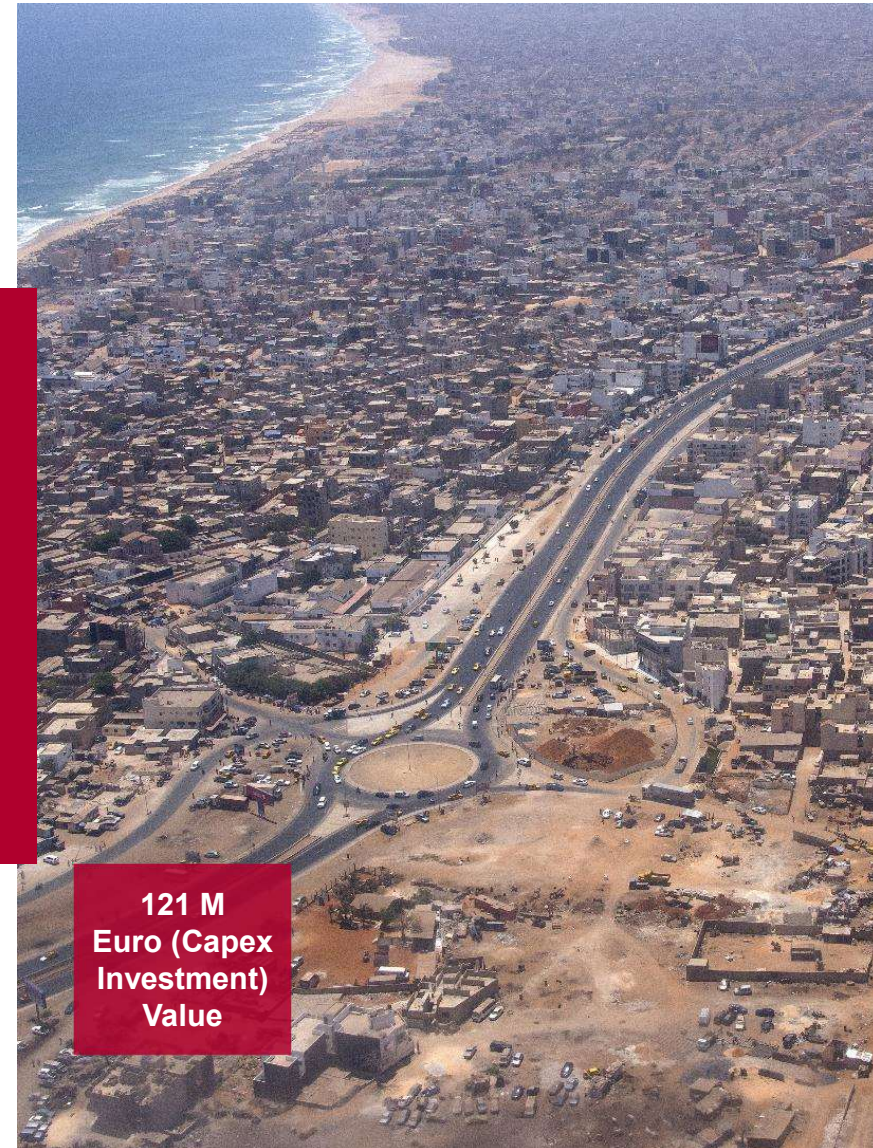
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Material Testing (Soil, aggregate, cement, concrete) Non -
Destructive Test



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BRIDGE & VIADUCTS



BRIDGE HKB

PROJECT

Bridge HKB (3rd Bridge Riviera - Marcory) and Flyovers intersection, Riviera in Senegal

CLIENT

SOCOPRIM - SACPRIM

BUREAU VERITAS ROLE

Independent Checking Engineer



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**310 M
Euro (Capex
investment)**

BRIDGE & VIADUCTS



VENTABREN VIADUCT

PROJECT

Construction of SNCF Ventabren Viaduct in France

CLIENT

SNFC

BUREAU VERITAS ROLE

Project management related services



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**33 M
Euro (Capex
investment)**

TUNNEL



SENTOSA GATEWAY (ER295)

PROJECT

Construction of Underpass at Sentosa Gateway (ER295)

CLIENT

Land Transport Authority

BUREAU VERITAS ROLE

Project management related services

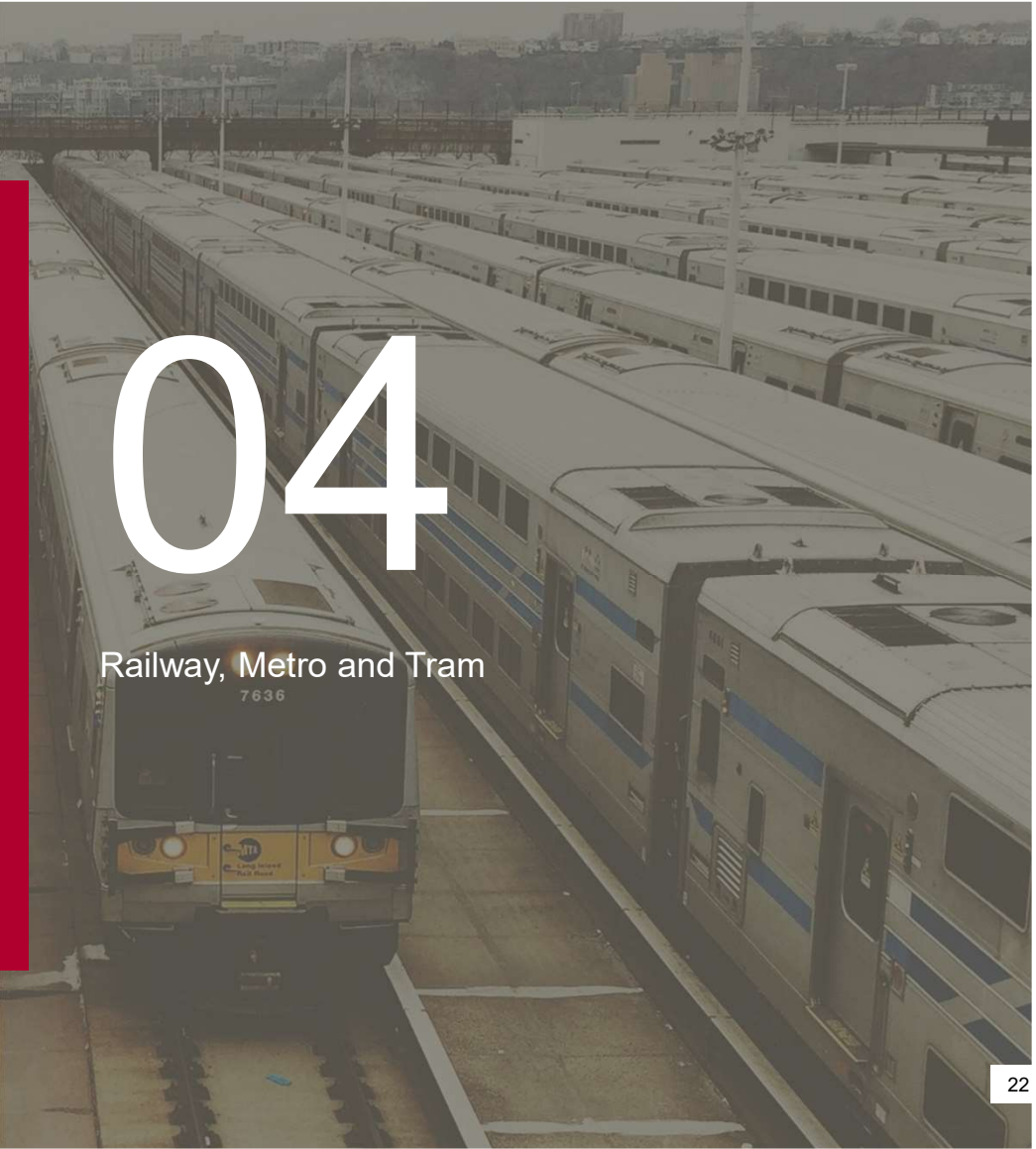


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**912 k
Euro**



04

Railway, Metro and Tram



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RAIL ASSET



Railway, Metro and Tram

Energy / Waste
Management Monitoring

Design Review:
Structural / M&E QA/QC

Rolling Stock
Procurement Control

ISA Independent Safety Assessment
TSI Interoperability Certification

Signaling Safety
Review

Fire Safety
Study

Geotechnical
Investigation

Construction
material Testing

Environmental Impact Assessment

National Regulation Certification

Project Management Assistance
Independent Cheking Engineer

IRIS(International Railway Industry Standard)
Certification / ISO Certification



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RAIL



RIYADH METRO

PROJECT

Construction of Riyadh Metro - KSA

CLIENT

Consortium BACS (led by Bechtel & Siemens)

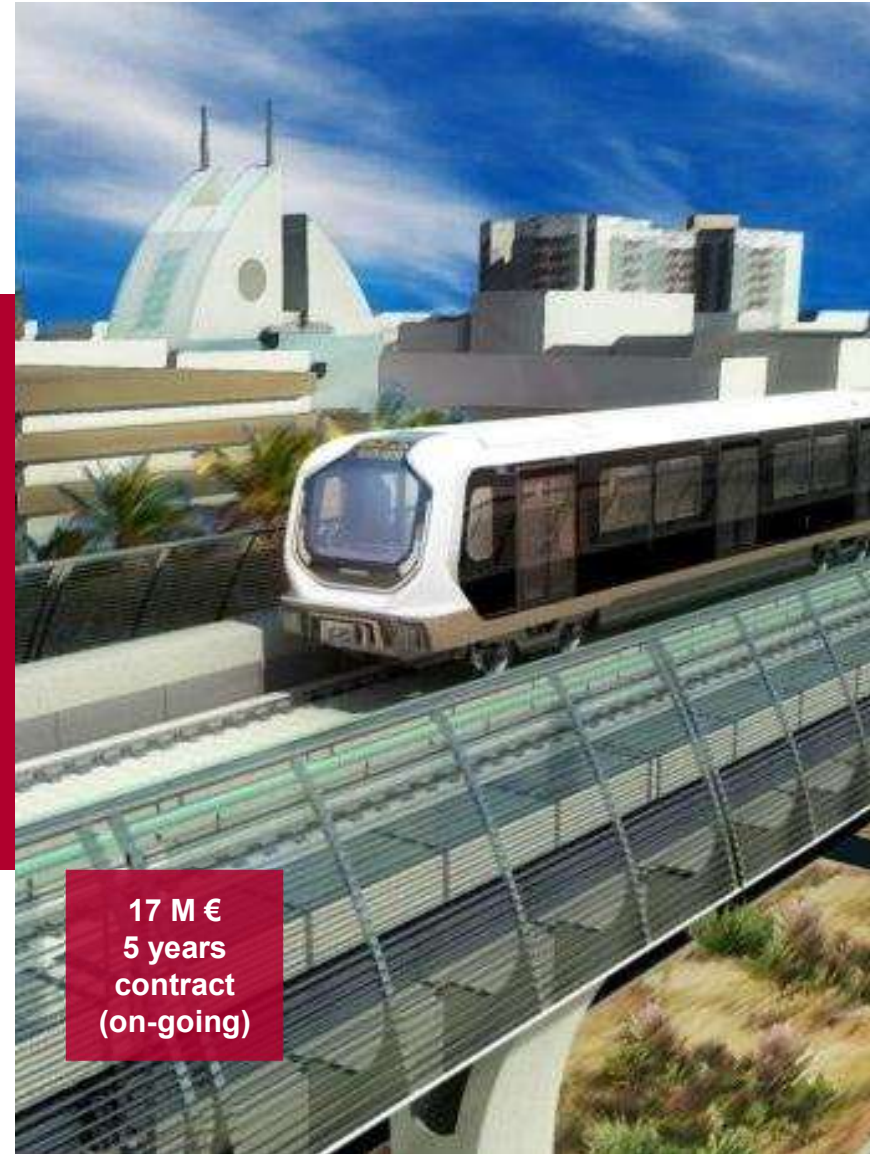
BUREAU VERITAS ROLE

Independent Checking Engineer



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**17 M €
5 years
contract
(on-going)**

RAIL



SAO PAULO METRO

PROJECT

Construction of Phase 2 of line 4 of Sao Paulo metro

CLIENT

Consortium BACS (led by Bechtel & Siemens)

BUREAU VERITAS ROLE

Supervision, Project Management



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**7.7 M
Euro**

RAIL



MRT STATIONS & TUNNELS

PROJECT

Construction of Woodlands and Woodlands North MRT Stations & Tunnels

CLIENT

Land Transport Authority

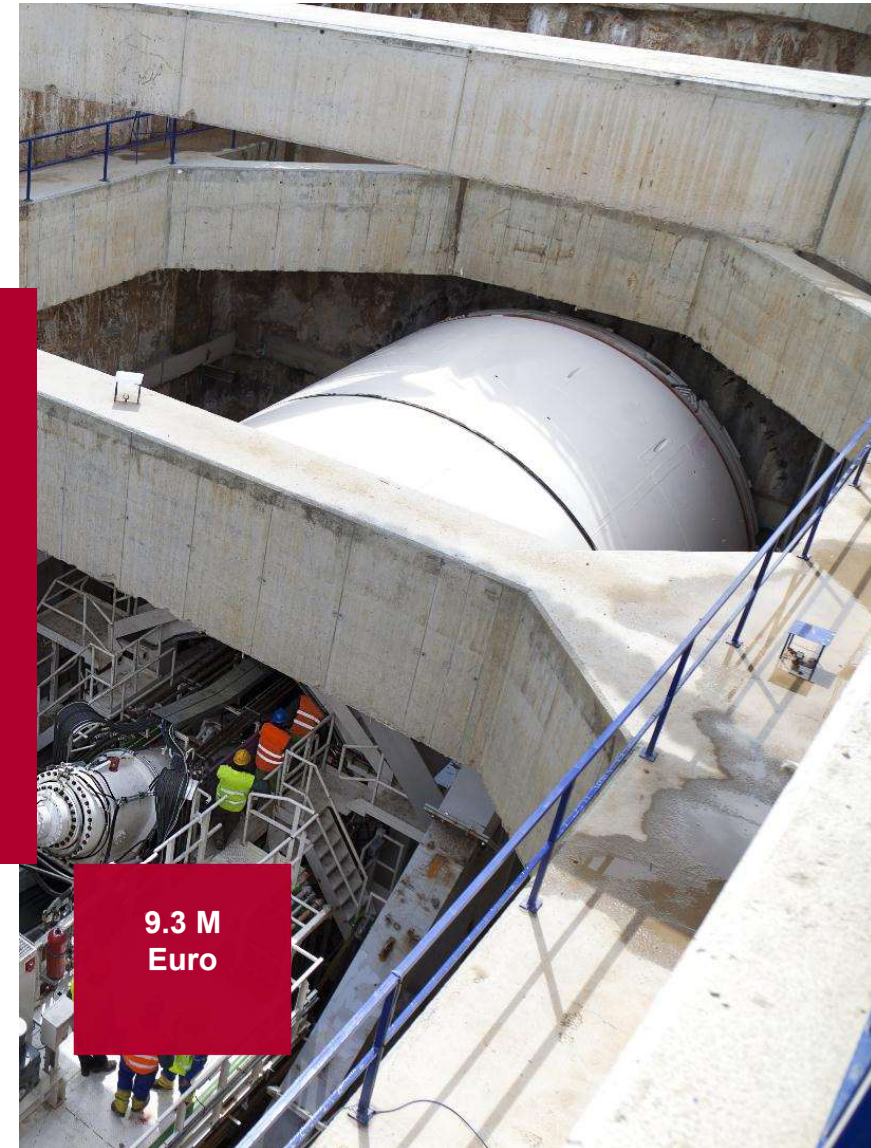
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Supervision, Project Management



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9.3 M
Euro

RAIL



DIVAČA – KOPER LINE

PROJECT

Modernization of line Divača - Koper in Slovenia

CLIENT

Holding slovenske železnice D.D.

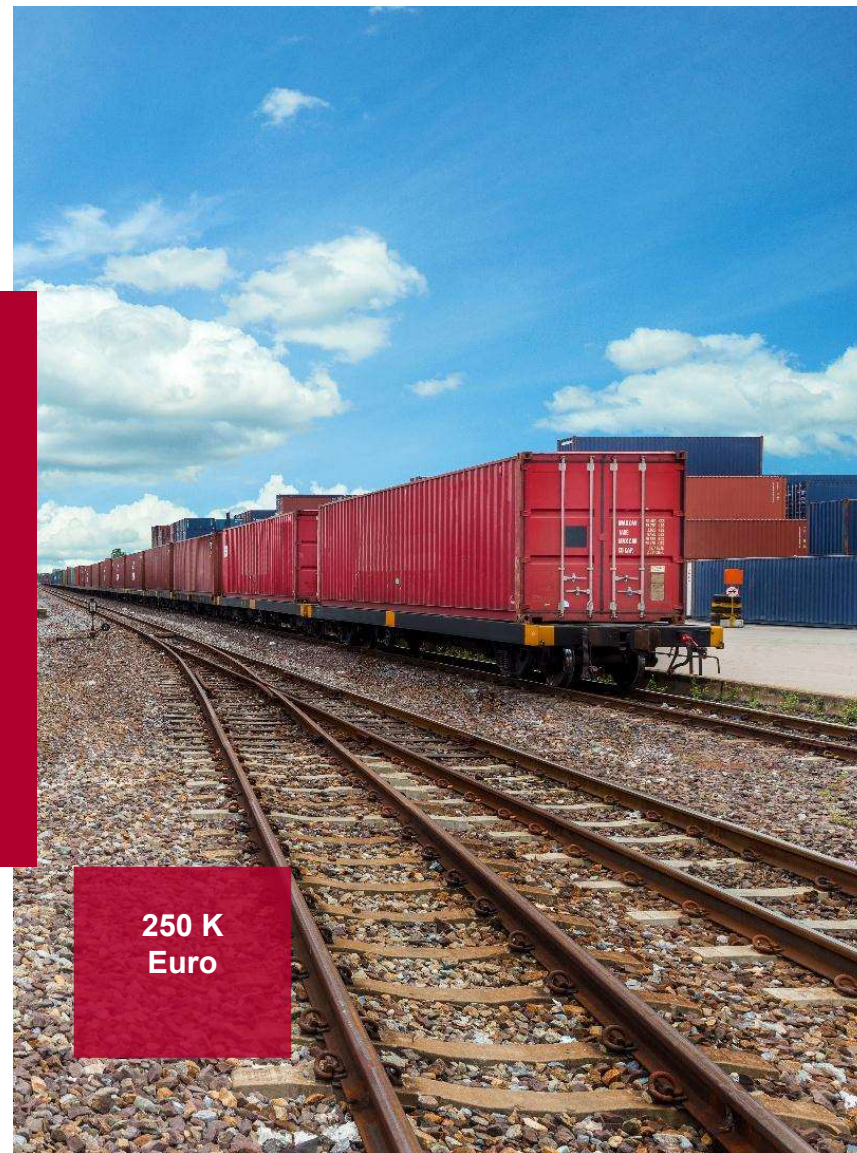
BUREAU VERITAS ROLE

Technical Control



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250 K
Euro

RAIL



CORRIDOR DO NORTE TETE TO NACALA

PROJECT

Corridor Do Norte Tete to Nacala (912 km) In Mozambique

CLIENT

CDN a VALE company

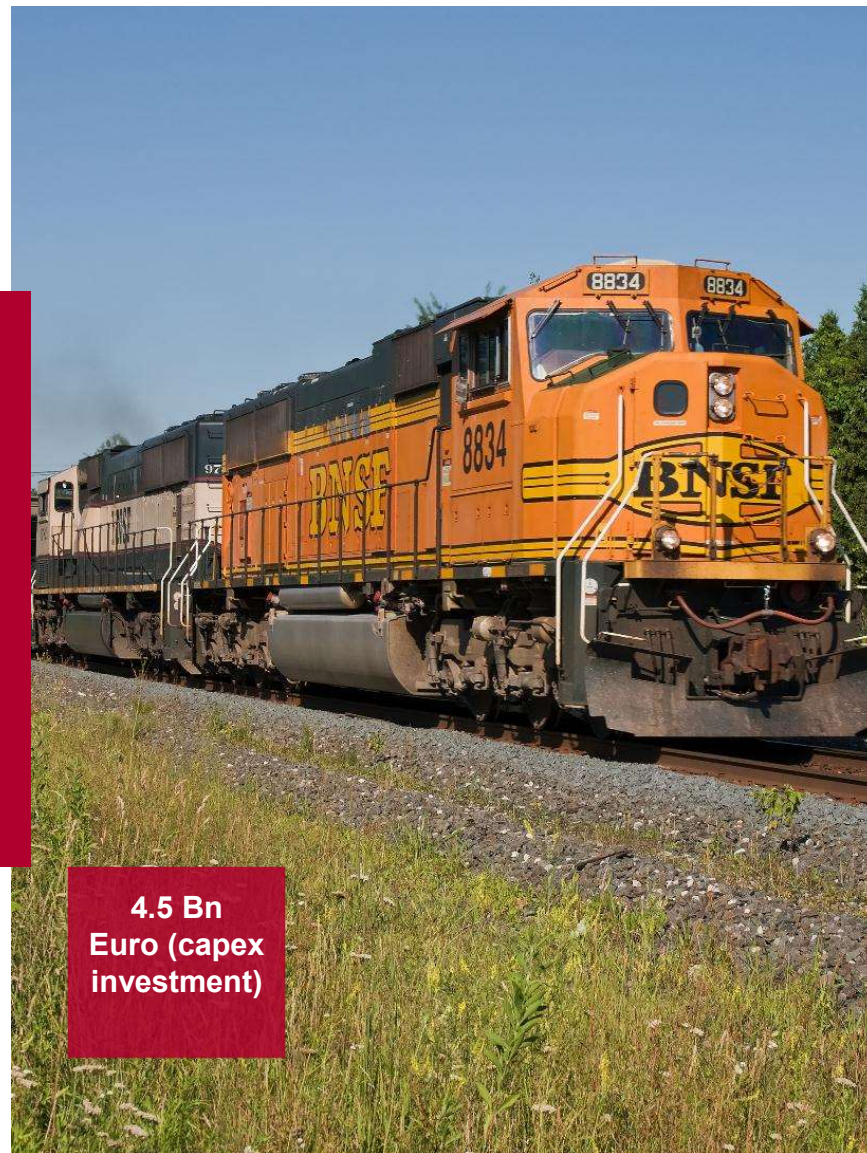
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HSE services



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**4.5 Bn
Euro (capex
investment)**

05

AIRPORT



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AIRPORT



Airport

Safety & Security Audits
Compliance with International &
National regulations

Energy / Waste Management Monitoring

Geotechnical
Investigation

Equipment In-Service
Inspection

Equipment Procurement
Control

Fire Safety
Study

Design Review:
Structural / M&E QA/QC

Environmental Impact Assessment

Construction
Material Testing

Quality Audits

Health & Safety Monitoring

ISO Certification



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AIRPORT



Heathrow Airport

PROJECT

In service inspection of Heathrow Airport in UK

CLIENT

Heathrow Airport Holdings

BUREAU VERITAS ROLE

Technical Assistance and system Inspection



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1.2 M
Euro per year
(since 2012)

AIRPORT



POINTE NOIRE AIRPORT

PROJECT

Construction of Pointe Noire Airport - Congo

CLIENT

DGGT

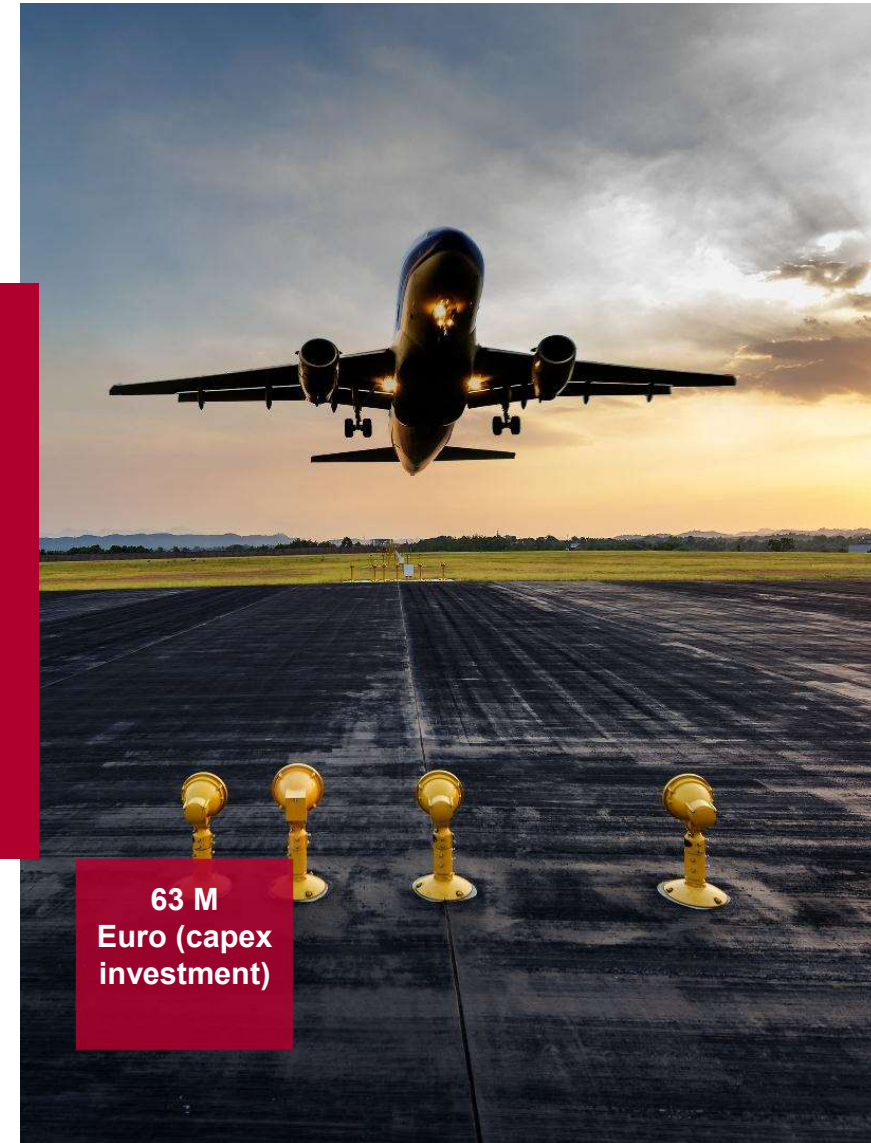
BUREAU VERITAS ROLE

Project Management Assistance and Supervision



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63 M
Euro (capex
investment)

AIRPORT



DALIAN NEW AIRPORT

PROJECT

Dalian New Airport Landfill and inner project in China

CLIENT

Dalian Land Reserve Centre

BUREAU VERITAS ROLE

Project Management, Supervision and Jianli



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AIRPORT



AIRPORT-STADT OST

PROJECT

Construction of Airport-Stadt Ost, Bremen in Germany

CLIENT

HafenCity Hamburg GmbH

BUREAU VERITAS ROLE

Project Management, Supervision in both design and construction stage



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**7.6 M
Euro**

06

Port and Maritime
Water and wastewater
network and plants



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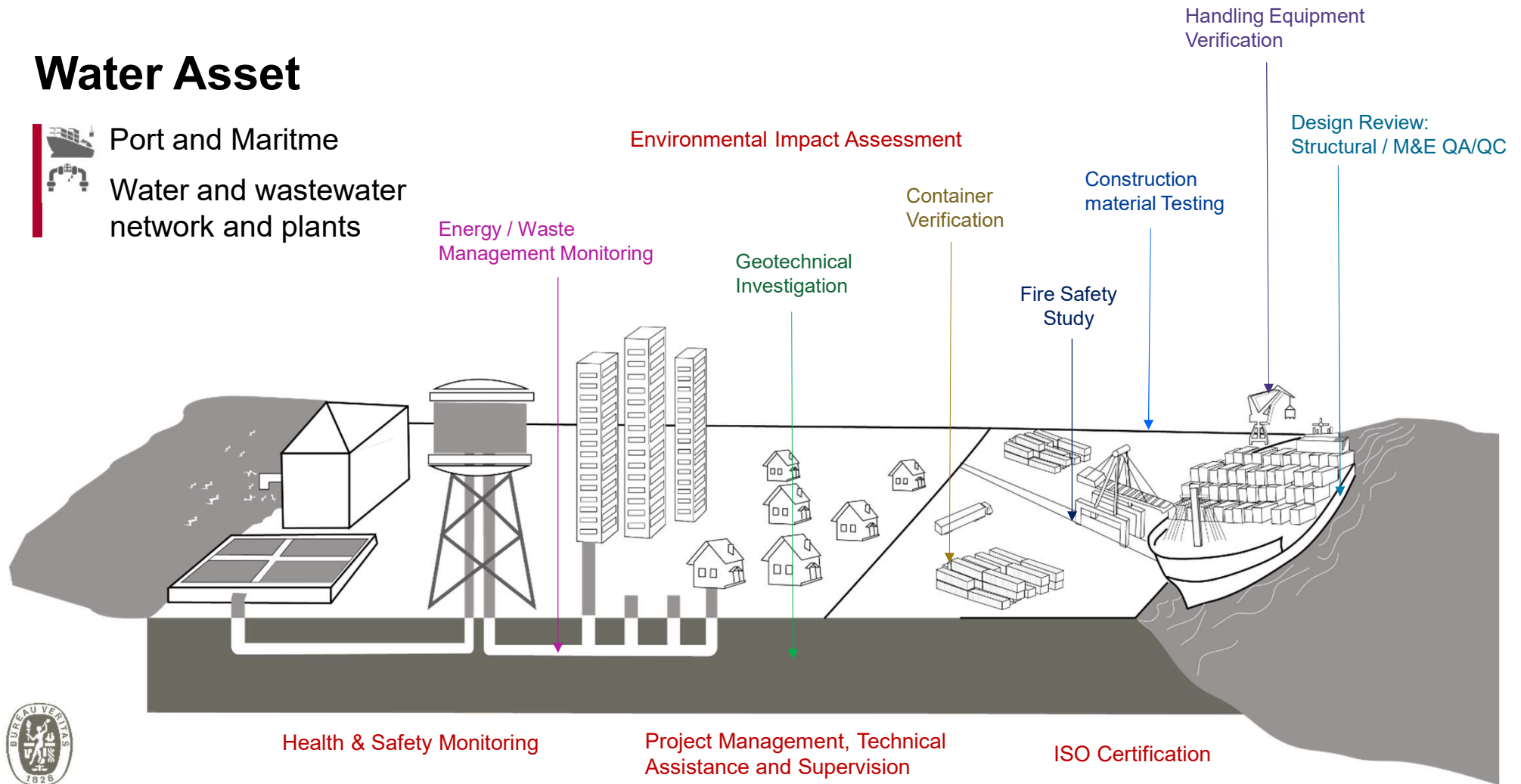
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Water Asset



Port and Maritime

Water and wastewater
network and plants



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PORT



HYDROVIA TIETE PARANA

PROJECT

Hydrovia Tiete Parana, with construction of new terminals, doubling locks and enlarging of the navigable area in Brazil

CLIENT

DH - Departamento Hídrico da Secretaria de Estado de Logística e Transportes

BUREAU VERITAS ROLE

Project Management and Supervision



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**9.2 M
Euro**

PORT



NORTHERN AKTAU PORT

PROJECT

Extension of the northern Aktau Port in Kazakhstan

CLIENT

Aktau Marine North Terminal

BUREAU VERITAS ROLE

Project Management and Supervision



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900 k
Euro

PORT



KHALIFA PORT

PROJECT

Khalifa Port & Industrial zone in UAE

CLIENT

Abu Dhabi Ports Company

BUREAU VERITAS ROLE

TPI Services for civil works on site and at Source, Port Cranes fabrication and Installation inspections



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WATER ASSET



SPARK SINO-FRENCH SH FENGXIAN WWT PLANT

PROJECT

Construction of Spark Sino-French SH Fengxian WWT Plant in China

CLIENT

SPARK SINO-FRENCH

BUREAU VERITAS ROLE

Project Management, Supervision and Jianli



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**1.6 M
Euro**

WATER ASSET



COORDENADORIA DE EMPREEND. SUL - RES

PROJECT

Water supply & sewage systems network construction in
Coordenadoria de Empreend. Sul - RES. Sao Paulo Brazil

CLIENT

SABESP - Cia de Saneamento Básico do Estado de São Paulo

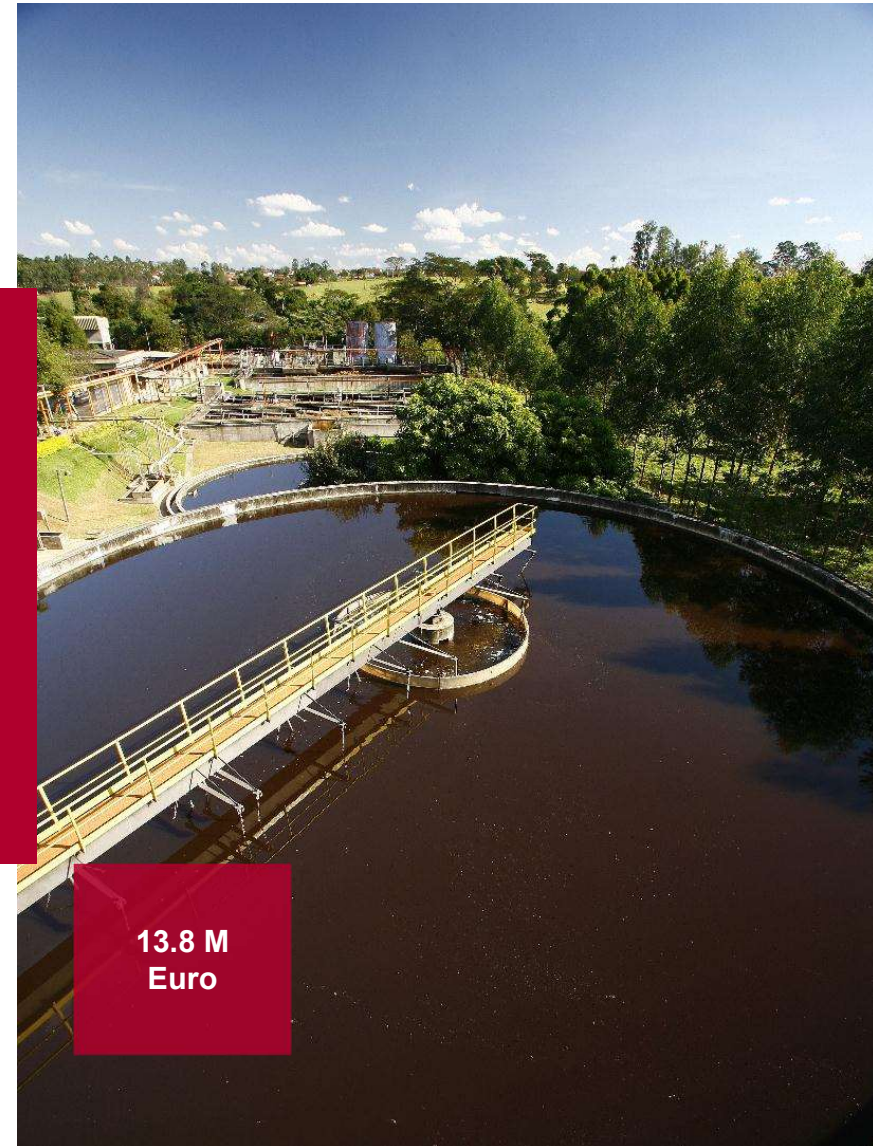
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Project Management and Supervision



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**13.8 M
Euro**

WATER ASSET



KARNATAKA URBAN WATER SUPPLY

PROJECT

Karnataka Urban Water Supply Project in India

CLIENT

Karnataka Urban Water Supply And Drainage Board

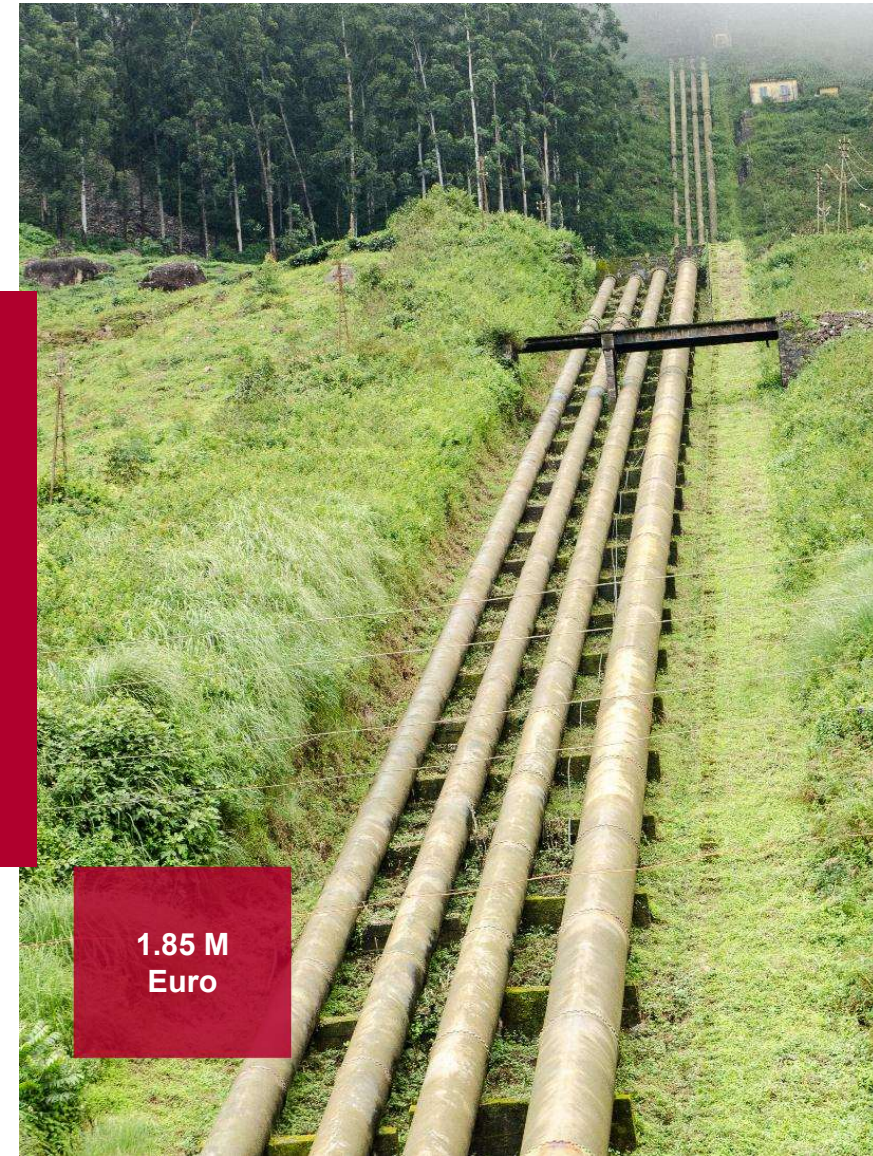
BUREAU VERITAS ROLE

Shop & Site QA/QC, Supplier Technical Assessment



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1.85 M
Euro



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07

Industrial and Energy asset

Industrial and Energy asset



Electrical utilities and dams



Industrial plants

Safety & Security Audits
Compliance with
International & National regulations

Fire Safety Study

Geotechnical Investigation

Energy/Waste Management
Monitoring

Equipment Procurement
Control

Equipment In-Service
Inspection

Environmental Impact
Assessment

Construction
material Testing

Project Management Assistance

ISO Certification



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DAMS



LAMAS DAM

PROJECT

Lamas Dam Construction Project - Caserones Mine
In Chile

CLIENT

MINERIA Y CONSTRUCCION CEI

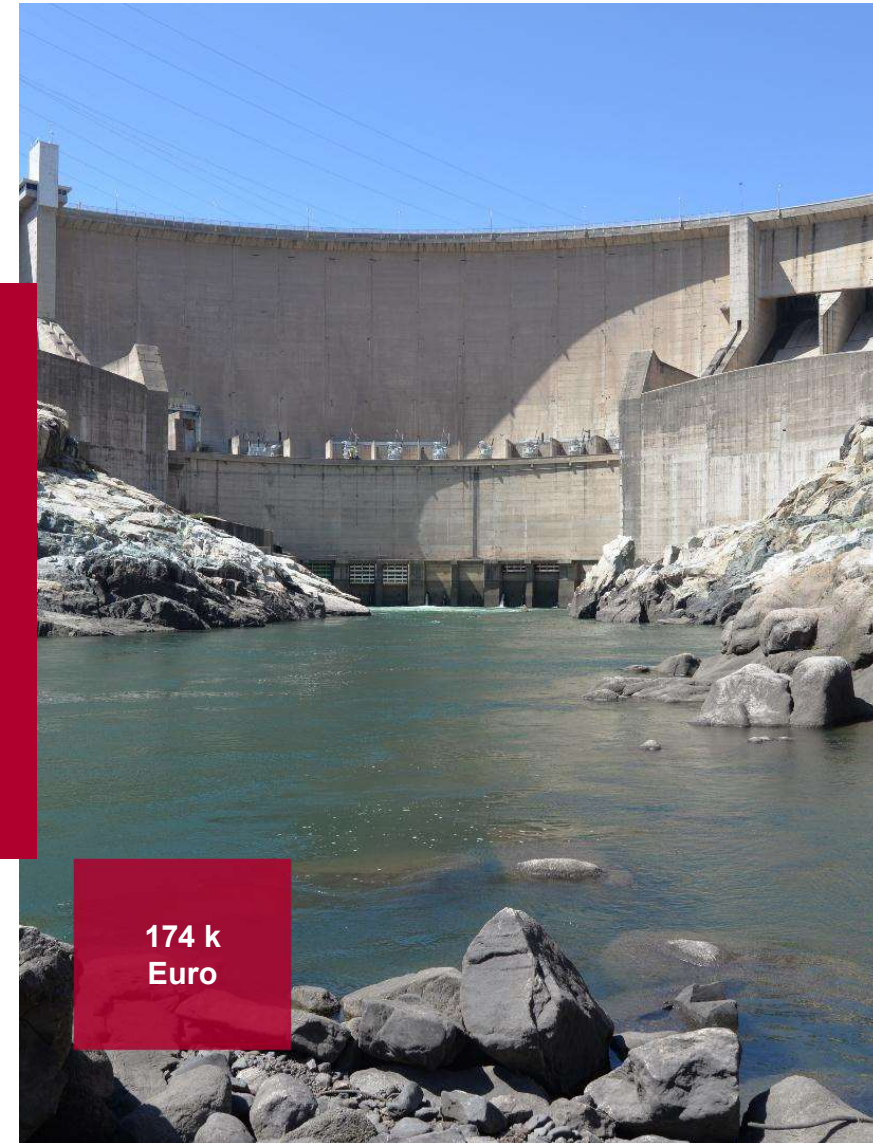
BUREAU VERITAS ROLE

Quality Control Services - Soil Mechanics Area



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174 k
Euro

POWER PLANT



HEATING POWER PLANT

PROJECT

Heating power plant for the district of Sichuan, Hubei, Shanxi, Beijing in China

CLIENT

French Development Agency

BUREAU VERITAS ROLE

Technical Design Review, Construction Quality Audit
Environmental Due Diligence



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ENERGY



SUNRISE POWERLINK

PROJECT

Sunrise Powerlink in California US

CLIENT

SDG&E

BUREAU VERITAS ROLE

Technical control, design verification, SWPPP compliance, inspection



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5.4 M
Euro

Building



BUILDING AND FACILITIES SERVICES



CAPEX

PERMITTING | DESIGN | CONSTRUCTION

HANDOVER

ACCEPTANCE
OF WORKS | GREEN BUILDING
CERTIFICATION

OPEX

OPERATIONAL
PERFORMANCE | TRANSACTIONS | RETROFITTING



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FACILITIES



ASSESSMENT SERVICES

PROJECT

Wal Mart - Assessment of Electrical System, Building Safety and Fire Training in Bangladesh

CLIENT

Wal Mart

BUREAU VERITAS ROLE

Performance and Compliance Monitoring



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174 k
Euro

HOSPITALITY AND LEISURE



SHANGHAI DISNEY RESORT

PROJECT

Construction of Shanghai Disney Resort

CLIENT

Walt Disney Company

BUREAU VERITAS ROLE

Project Management Assistance



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HEALTH



CLEVELAND CLINIC

PROJECT

QA & QC for Cleveland clinic in Abu Dhabi

CLIENT

Sixco Samsung JV

BUREAU VERITAS ROLE

QA/QC Services



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BUSINESS DISTRICT



NEW HEAD QUARTER BNL (BNP PARIBAS)

PROJECT

QA & QC for New Head Quarter BNL (BNP Paribas) in Rome Italy

CLIENT

BNP Paribas

BUREAU VERITAS ROLE

QA/QC, Project Monitoring and Technical control



400 k
Euro



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BUREAU VERITAS' EMPLOYEE BASE IS ITS MAIN ASSET



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Move Forward with Confidence*



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