

# PROCESL, Engenharia Hidráulica e Ambiental, Lda.



# Subject-matters

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Land Use and Development

Integrated Quality Management

Mechanical Engineering

Environmental Community Law and Policy

Geology

Management and Environmental Restoration

Water Resources

Civil Engineering

Agronomic Engineering

Animal Science

Wildlife and Environment Resources

Biology

Environmental Planning

Engineering Forestry and Natural Resources

Architecture

Geography

Electrical Engineering

Chemical Engineering

Power Engineering and Power System

Biophysics Engineering

Landscape Architecture

Health and Safety at Work

Archaeology

Business Management

Environmental Engineering

Geographic Information Systems

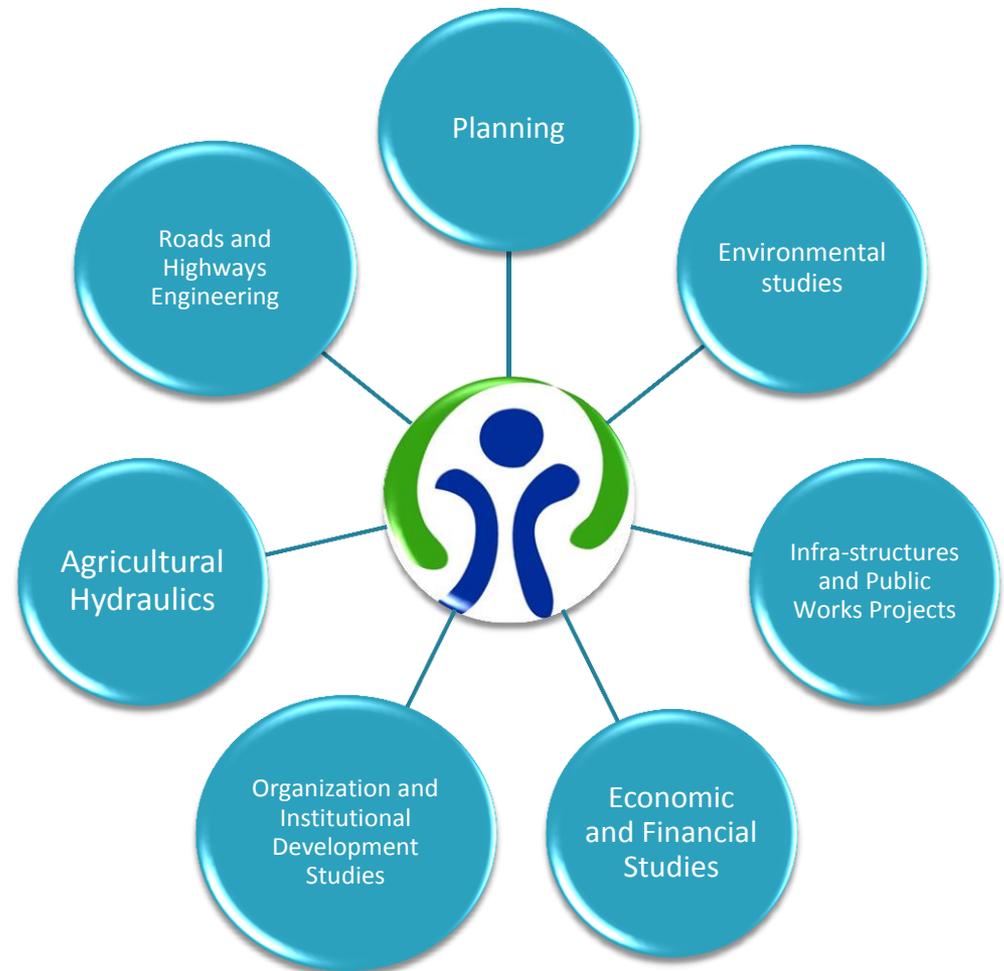
Integrated Management and Waste Recovery

# Areas of Activity

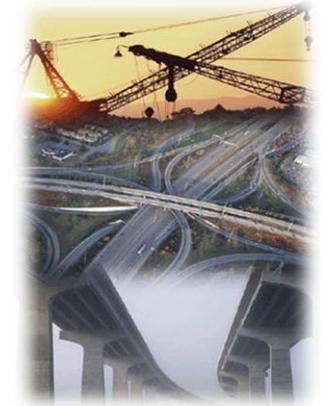
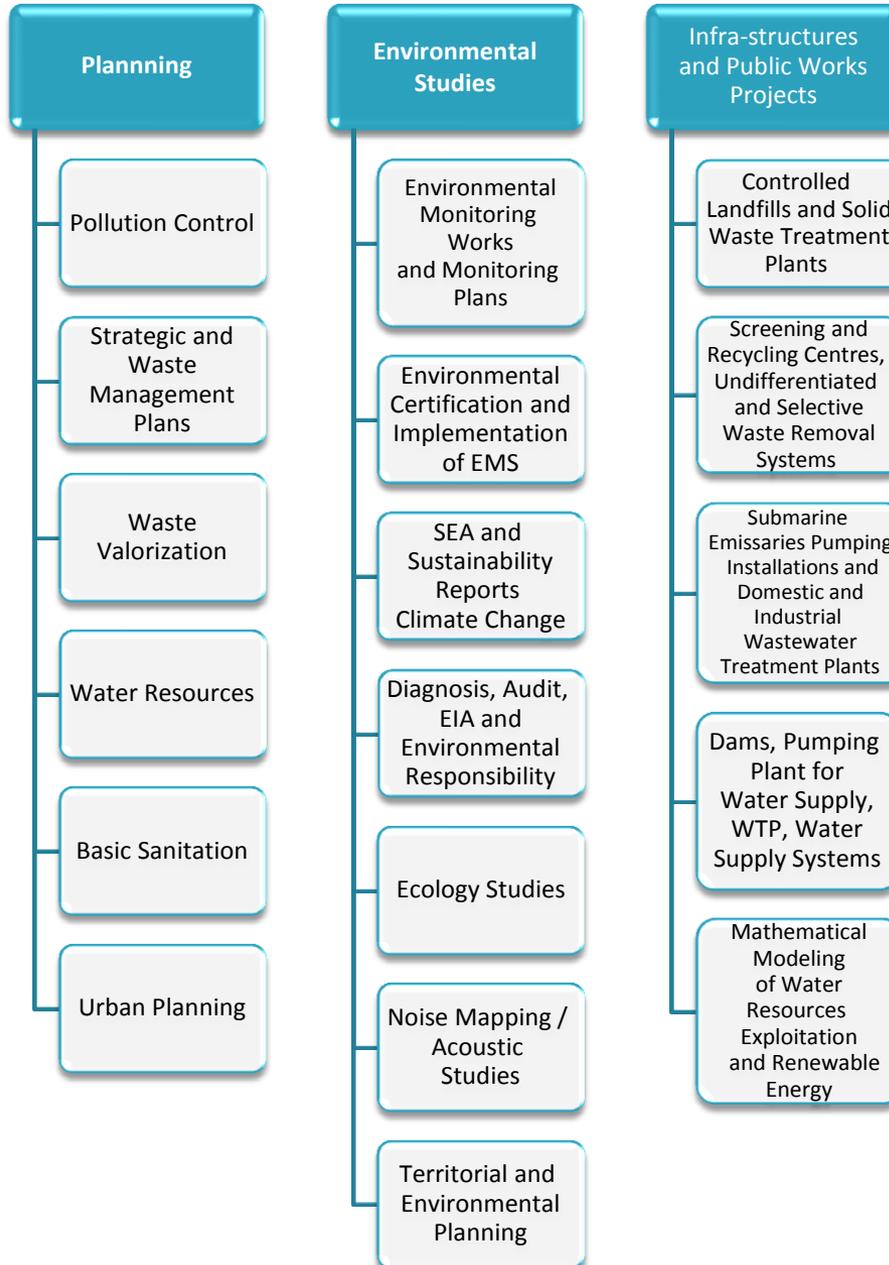
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PROCESL assures a global engineering high quality, providing the best technical resources to achieve the optimization of its results.

The scope of its activity is consulting and developing projects and studies in engineering, construction and planning, especially in the field of hydraulic, sanitary and environmental engineering.



# Areas of Activity



# Areas of Activity



## Roads and Highways Engineering

- Geometric design of roads and Earthworks
- Drainage
- Roads Signs and Safety Equipment
- Pavements
- Fencing and road limits , Land Expropriations, Traffic detours and temporary road connections
- Electrical and Telecom Infrastructures
- Environmental impact assessments and landscaping

## Economic and Financial Studies

- Support for Implementation of Organizational Reforms
- Financial and Economic Evaluation of Projects
- Studies of Basic Sanitation Systems Financial Basis
- Socioeconomic studies



## Organization and Institutional Development Studies

- Administrative Organization of Basic Sanitation Services
- Proposals for Legislation and Regulation in the Sanitation Field
- Rationalization of Working Methods and Decision Circuits



## Agricultural Hydraulics

- Irrigation Schemes
- Rural Roads
- Agricultural Drainage
- Hydraulic Works adduction
- Irrigation Networks



# Companies in which PROCESL has a holding

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- HIDROQUATRO – Consultores de Hidráulica, Recursos Hídricos e Ambiente, Lda.  
(100% since September 1999)
- AIA – Avaliação de Impactes Ambientais, Lda. (100% since September 1999)
- Ecoprogresso - (55% since August 2010)

# International Partnerships

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- South Africa – ProRem
- Angola – SOAPRO
- Brazil – Cobrape
- Lybia – Al Raed
- Macau/China – CeslÁsia





# Wastewater Treatment Plant Macao

- Location: Aterro da Areia Preta – Macao
- Technical Assistance, Co-ordination and Supervision of the construction works and equipment supply in association with CESL-ASIA (CESL Group)
- Main characteristics
  - Liquid phase with 3 18 000 m<sup>3</sup>/lines
  - Solid phase with 3 band filters (30% MS) and 1 sludge and used oil incinerator with a 75 tonne/day capacity for solid waste
  - Treatment and control of combustion gases, noise and odours



# Solid Waste Incineration Plant Macao



## Main characteristics

- 3 lines of 12 tonne/h (two are in place since 1992 and a third one will be installed in 2012)
- Reverse-acting incinerators and natural circulation boilers
- Treatment of gases by semi-humid reactor

- Location: Taipa Island – Macao



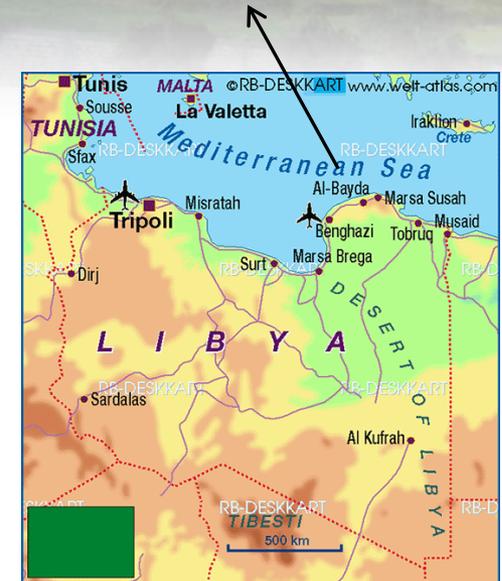
# Consultancy Services for Dominica Solid Waste Final Design, Tender Documents, Supervision of Construction

- Location: Roseau – Dominica
- Design of a new sanitary landfill capacity of 170.000 m<sup>3</sup>, to be constructed in a quarry area near Rouseau
- Work description
  - Design of the restoration of two obsolete existing landfills including environmental recuperation and safe environmental closure
  - Preparation of Tender Documents
  - Evaluation of Works Tender
  - Supervision of Works



# Al Bayda Infrastructures Redevelopment Project – 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Phase

- Location: Al Bayda, Libya
- Main characteristics
  - 1<sup>st</sup> Stage - Assessment and diagnosis of networks of existing infrastructures, the rough estimate and preliminary investment needed for renewal and rehabilitation
  - 2<sup>nd</sup> Stage - Preparation of preliminary design of this solution
  - 3<sup>rd</sup> Stage - Preparation of the detailed design of these and technical assistance



# Consultancy to Evaluate the Social and Environmental Impact of the PMER (Angola)

Location: Provinces of Bié, Huambo, Malange, Moxico, North Kwanza, Luanda and Uíge

- Preparation of terms of reference for tenders, environmental impact assessment, environmental monitoring of the works included in the project, environmental management and training of the senior technicians of the various ministries in the evaluation of the environmental impact

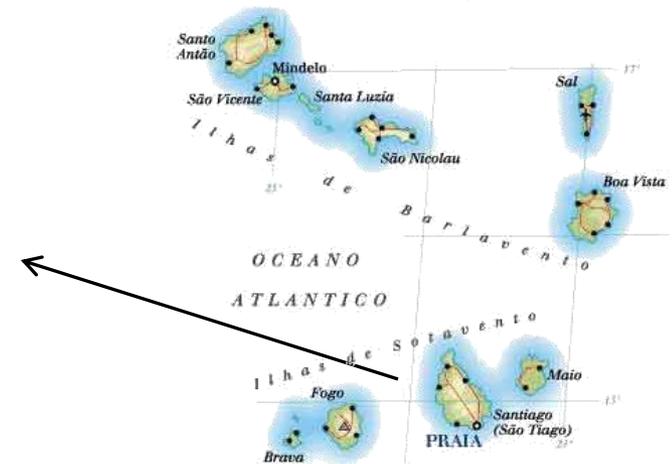


- Activities:
  - To contextualise the environmental and social process
  - To develop the evaluation of the subprojects and implementation
  - To improve institutional capacity

# Environmental, Quality and Safety Monitoring Works in the Port of Praia

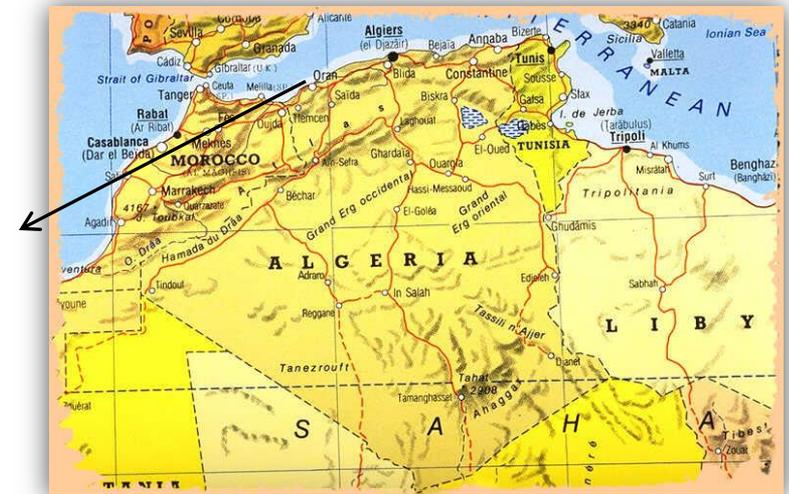
- Location: City of Praia, Island of Santiago – Cape Verde
- Setting up and implementation of the Quality, Environmental and Safety Management System, including the preparation of the corresponding Environmental Management Plan (EMP), the Safety and Health Plan (SHP) and the Quality Plan (QP)

- Noise, Vibrations and Quality of Air Monitoring



# Detailed Design of the Affected Networks Infrastructures for the Oran Surface Subway

- Location: Oran, Algeria
- Identification of conflict situations, design of temporary and definitive works, detailed design of approved solutions and analysis of the contractor's proposal for the works



# Code of Practice for Waste Management on Islands

- European Islands: Mallorca (Spain), Crete (Greece), Barnholm (Denmark), Isle of Wight (UK), Madeira and Azores (Portugal)
- PROCESL was responsible for the study related to the Portuguese Islands
- The manual includes:
  - Legal framework
  - Identification of solid waste management problems
  - Selection of strategies
  - Organisation
  - Collection solutions
  - Transport and treatment
  - Economic aspects
  - Implementation of solutions and strategies



# Hydrological Master Plan of the Tagus river catchment areas

- Location: Basins of the Tagus river, Portugal
- Direction of the Plan and the joint venture coordination with participation in all the phases of the Plan and was responsible for the following activities:
- Diagnosis
- Proposal of actions and measures
- Physical and financial planning



**Thank You**