

CONTRACT AWARDS

Protecting Odaw Channel and Korle Lagoon.

An IMDC led consortium has been awarded the Feasibility Study for Deferred and Performance Based Maintenance Dredging of the Odaw Channel and Korle Lagoon in Ghana.

The overall objective is to contribute to achieving 1 in 10 years flood protection in the primary Odaw channel system, by preparing a ready-to-tender Performance Based Contracting (PBC) investment. The project is part of the broader World Bank GARID program.

The assignment consists of a feasibility study and preparations for a PBC tender, which will be a first of its kind in Ghana. Specific objectives of the feasibility study are:

- To assess the feasibility of deferred and routine maintenance dredging options from a technical, economic, financial, environmental and social perspective of the main Odaw River channel and the main tributaries.
- To optimize and develop conceptual designs of investment options, including identification of opportunities for beneficial use of dredged material.
- To assess public-private partnership (PPP) and joint venture possibilities and risks.
- To review management capacity of responsible institutions and assess required capacity building and training needs regarding Performance Based Contracting.
- To propose options for preventing or significantly reducing future siltation of the basin.

Contact: Jon KEMP

NEW ACQUISITIONS

Kanhar Barrage Project

An irrigation project which has been in the planning for over 50 years, has a Gross Command Area of over 102,000Ha and a Culturable Command Area of 53,283 Ha, over 150km of main canal and distribution system of over 470km. These impressive numbers are for the Kanhar Barrage Project in Garhwa District of the State of Jharkhand in India. The project will construct a 224m long, 12m high barrage across Kanhar river to divert 66 m³/s of flow and create a live storage of 2.9 MCM.

Tractebel India is proud to announce completion of survey, investigation and Detailed Project Report for the project. Tractebel

NEWS FROM ONGOING PROJECTS

Kárahnjúkar Dam, an icelandic story success

The 198m high concrete face rockfill dam Kárahnjúkar Dam is the centrepiece of the hydropower power system of the same name, which, with an installed capacity of 690 MW, is the largest power plant in Iceland. The project is well known by Tractebel France since we have been involved as Owners' Representative on Site during the construction phase.

The dam has performed well since first filling, however, two leakage issues in the foundation require further investigation and possibly mitigation. The Owner, the National Power Company of Iceland, has thus launched a public tender for dam foundation engineering work. The project is planned in two phases. Phase 1 comprises an assessment of the leakage issues and evaluation of potential mitigation measures. Phase 2 consists of design, preparation of tender documents and assistance in supervision of execution selected mitigation measures.

Further to a transparent competition against other international reputable engineering firms, Tractebel France has distinguished itself by the added value of his technical proposal and the competitiveness of the proposed price and has been finally selected by the Owner. This success is a mark of trust from a former client and shows the significance of entertaining good long term relationship.

Contact: Yann DHYSER

has also obtained Techno-Economic Clearance for the Project from Ministry of Water Resources, Govt. of India. We have also assisted the client in obtaining environmental & Forest clearance and finalization of R&R Plan.

The project has the potential to completely transform water resources and irrigation landscape in the State of Jharkhand. In addition to irrigating a large area, the project also provides domestic and industrial water supply and envisages augmentation of several existing water-parched reservoirs & almost 2000 small & big water bodies in the region. The State is now pushing ahead to take this project towards implementation.

Contact: Dr. Jha Akhilesh

CONTRACT AWARDS

Feasibility and Detailed Design Studies for Water Transfer from North to Central Tunisia

Tractebel Engineering GmbH in Joint Venture with STUDI International (Tunisia) was awarded a contract worth EUR 2.800.000 by the Ministry of Agriculture, Hydraulic Resources and Fisheries of Tunisia represented by the General Directorate of Dams and Large Hydraulic Structures. The scope of services encompasses the preparation of feasibility studies and detailed designs to transfer unused water from the northern part of Tunisia to irrigated areas near the center of the country where demands are increasing.

In a first step, four transfer options will be analyzed and compared on pre-feasibility level. In a second step, the most promising option will be studied at feasibility and detailed design level. The studies will investigate solutions to increase water storage and transfer capacities by new construction and improvement of various dams, transfer pipelines and canals, pumping stations, intermediate reservoirs and hydraulic structures, as well as small hydropower plants. The scope of services includes topographic and geotechnical field works, technical due diligence, social and environmental impact assessment, as well as socio-economic studies. Study planning horizon is 2050.

The study period is a 12 months.

Contact: **Andreas Tietze, Dr. Beau Freeman**



NEW AQUISITIONS

Blue Energy Resource Assessment (BluERA)

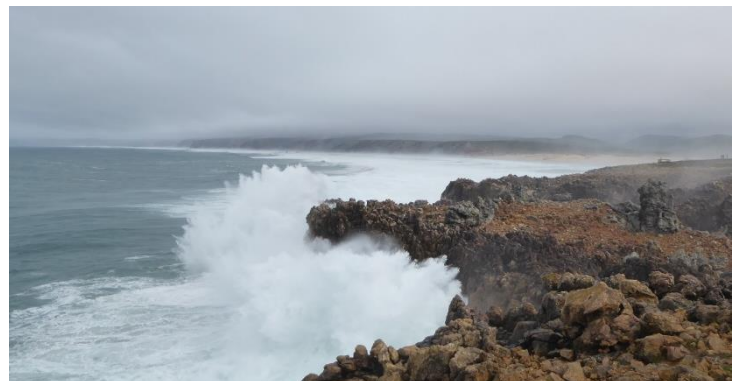
A consortium of IMDC, Laborelec and Otary RS NV has launched an industrial research project "Blue Energy Resource Assessment" (BluERA).

Blue energy is abundant, geographically diverse and renewable. This strategic research supports the energy transition to low carbon future by developing practical online web based interactive applications to assess energy resource potential and energy yield of ocean energy technologies in specific locations.

The BluERA will develop two online digital products, a digital ocean energy atlas and an energy yield evaluation tool.

It is planned that upon project realisation the ocean energy atlas of the Belgian part North Sea will be made public to facilitate development of wave energy sector. The ocean atlas would be a free, web-based application developed to help investors, project developers and policymakers, to identify high-energy yield potential areas for wave energy projects the Belgian part North Sea and perform preliminary calculations. Our consortium will develop the Atlas that allows making online queries and provides freely downloadable datasets based on the latest input data and modelling methodologies. The Atlas will provide considerable benefit for an emerging industry by giving new wave energy projects the critical information and data needed.

Contact: **Zafar Samadov**



CONTRACT AWARDS

PMC services for Liquid Jetty at JNPT, Mumbai

Tractebel India has been awarded a contract for “Project Management Consultancy (PMC) Services for the Construction of Additional Liquid Cargo Jetty” at Jawaharlal Nehru Port Trust (JNPT), one of the biggest ports on west coast of India. Presently, JNPT is handling the liquid cargo at the existing liquid bulk terminal with twin side berthing terminals (LB1/LB2). This terminal has a planned capacity of 6.5 MTPA. It was observed over the recent years that the existing liquid cargo terminal has been operating at very high berth occupancy rates resulting in unacceptable levels of pre-berthing detention.

To augment the capacity, twin type liquid jetty arrangement with 300m berth length on both sides is proposed to cater the future traffic demand. The proposed additional liquid cargo jetty is connected to existing BPCL oil jetty by Approach Bridge.

Tractebel is providing Project Management services for this project which covers qualitative supervision and proof checking of the jetty topside designs submitted by EPC contractor. Detailed engineering of the marine Civil works already been completed by another consultant, for which, Tractebel will coordinate and interface with the EPC contractor and Design Consultant to resolve all site related issues in an amicable and seamless manner. The project will be implemented over a period of 34 months and completed by November 2022.

Contact: Gopal Reddy & Rajesh Badamanji



EVENTS

A MOOC on Hydropower

A team of Tractebel experts have decided to share their knowledge about hydropower and make it available to everyone on the internet. As a recognised world leader in the design of dams and hydropower projects, we decided to explain with simple words the complexity of the whole hydropower spectrum: from design of the dams, project financing and structuring, and climate change impacts to operation and maintenance. For engineers and students, managers and business developers, or government agencies, this online training offers learning content adapted to non-experts willing to become familiar with the hydropower world.

Discover our video teaser: <https://www.youtube.com/watch?v=VBn1kZLBg3c&t=2s>

The MOOC named “Hydropower: Key issues and challenges in a changing energy world” was launched on April 20th. More than 1,300 persons are already following the MOOC. You can still register at <https://tractebel-moochydro.com>

Contact: Christophe DAUX

Do you want to know everything about Hydropower? Register for the MOOC prepared by Tractebel experts:

HYDROPOWER: Key issues and challenges in a changing energy world

Register now on : www.tractebel-moochydro.com

The MOOC content includes a total of 16 sequences divided into 5 sections, namely:

1. Introduction to hydropower energy
2. Hydropower projects: the basics
3. Building a reservoir of potential energy: dam technologies
4. Overcoming risks: from construction to operation
5. Designing & operating a hydropower plant: technical aspects and revenue models