TRACTEBEL
engie

Sherlock
Multi-criteria decision-support tool

Innovation serving your hydroelectric developments

A solution that provides quick and cost effective hydroelectric resources maps as well as a selection of maps that meet the requirements for your future hydroelectric projects.

Sherlock replaces long and costly inventory processes by relying on an intelligent data gathering, analysis and processing system.

Our approach
Sherlock is a spatial analysis solution that leverages and cross-references data to identify potential hydroelectric sites at the scale of a region or country.
It enables to quickly identify untapped hydroelectric resources and to measure their profitability in just a few hours.

Client benefits
- Generates results in just a few hours over a surface area of 250,000 m² (equivalent to the size of Guinea).
- Provides a detailed map of a country's hydroelectrical potential, as well as the production characteristics for each of the sites identified.
- Measures the attractiveness of each identified site, gauging its main characteristics inlcuding: dimensions, costs, and producible power.

Our added value
Sherlock harnesses all the power of Geographic Information Systems (GIS), modern computer tools and complex data analysis. It combines them with the technical expertise of our engineers, providing our clients with an exhaustive inventory of hydroelectric sites adapted to their specific requirements.

Sherlock is a modular tool that will continue to evolve and will meet clients' needs

Climate data

Hydrographic network

3D Models

Assessment of environmental and social impacts

Financial analyses

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SOME REFERENCES SHERLOCK

Small Hydro Atlas - Kenya
2017

Objective

Within the framework of a contract with ENGIE, the project consisted in identifying:
- all existing and under development hydropower projects in the country
- identify and characterize small / medium size hydropower potential sites within the country
- rank and comàpare the identified sites to highlight the most promising / interesting with respect to Client's requirements

Solutions

Use of Sherlock for identification and estimation of technical characteristics such as type of dam, installed capacity, CAPEX estimate

Results

Among 5000+ identified potential sites, 10 of the most relevant and promising were selected, and studied at pre-feasibility stage

Sofico - Belgium
2020

Objective

Within the framework of a competitive dialogue-type offer for an ENR asset concession project, submitted by a consortium ENGIE Impact - ENGIE Solutions - Tractebel: Inventories of potential hydroelectric and STEP sites in the rights-of-way managed by SOFICO in Wallonia (waterways and freeways)

Solutions

Use of the Sherlock tool for run-of-river site identification and ranking

Results

Among 5000+ identified potential sites, 10 32 hydroelectric sites have been selected. Of these sites, 26 correspond to dam projects (13 existing sites such as mills or constructed weirs and 13 new sites identified by Sherlock) and 6 correspond to PSP. These sites have been the subject of a detailed description sheet

Nam Pawn Chaung - Myanmar
2017

Objective

Feasibility study on the Nam Pawn River - Study of potential hydro sites

Solutions

Use of the Sherlock tool for run-of-river as well as reservoir site identification and ranking

Results

11 sites were identified and pre-selected. One of these sites has been proposed to a private developer to carry out detailed studies

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