MODELING OF ENERGY PROJECTS

COSSACK ENERGY

Purpose of the presentation

Explain difference between three key models

Rate their costs , depth and strategic value

Help choose the optimal approach for investors, developers, traders, donors, municipalities etc.

Three models for energy project

There are three modeling approaches on the market energy projects :

1. **Standard feasibility study**
2. **Digital Twin 8760**
3. **Business model ”power arbitrage”**

INTRODU

PROBLEM DESCRIPTION

PROBLEM

UNCERTAINTY AT THE START

Before starting the energy project customer faces a typical dilemma : "What type of project, research or consultations I need to evaluate risks , and not to spend too much?"

UNDERSTANDING MODEL DIFFERENCES IS CRITICALLY IMPORTANT!

Each model has its own role:
Feasibility study - for the start,
Digital Twin - for the bank,
Power Arbitrage - for profit

ALL CLIENTS WANT TO SOLVE TWO MAIN PROBLEMS:

SAVING FUNDS

How not to overpay for excess detailing , which model is optimal in my case ?

MANAGEMENT RISKS

How to predict technical , financial and market risks? How to determine isthe project doable and profitable ?

"What type of model me need to evaluate risks and keep costs reasonable?

MODEL DESCRIPTION

”FEASIBILITY STUDY"

The model gives enough information for go / no-go decision.

«DIGITAL TWIN 8760»

Its digital model of energy asset performance.
Model aacounts for each of the 8760 hours in the year, taking into account real generation and actual electricity prices .
It will help to: evaluate financial indicators (less risks for the investor), choose optimal equipment and project configuration (optimize investments), maximize income through accurate placement in the market.

”POWER ARBITRATION"

Financial and trading model that shows optimal mode of electricity purchase and sale from using own or contracted generation and storage systems energy.
If you are you planning engage in trading – this is the business model .

The feasibility study kicks off, the Digital Twin helps to accurately design and operate the asset, and the business model of arbitrage maximizes its long-term economic returns in a competitive market.

EVALUATION OF THREE MODELS

“FEASIBILITY STUDY“

”FS" is technical an assessment that answers the question: "Does technical opportunity exist and what is the economic expediency of energy project"

Price: 2-5k EUR

“DIGITAL TWIN 8760”

«Digital Twin 8760» - simulation that answers the question: " How many energy will I produce, buy and sell every hour of the year at the price at that particular hour?

Price: 5-8k EUR

“ARBITRAGE”

Financial simulation that corresponds
to the question: "How to maximize conversion this energy into money playing on the difference market prices ?

Price: 8-10k EUR