



CASE HISTORY — GROWING EDGE PARTNERS

INTERNATIONAL ENERGY FIELD PLANNING

The Challenge

The normal planning window for converting an exploration field to a production field—proving up the reserves, developing the drilling plan, designing the facilities and other infrastructure, and the subsequent economic assessment—is slightly over two years. In this case, an oil company's lease for significant gas reserves off the Namibian coast was set to expire within one year. To convert this field for production required significant capital investment quickly. The oil company proposed a radical experiment: join the upstream technical experts from both the oil company and its Namibian counterpart to complete the field viability assessments within three weeks.

The field being explored was well off the African coast. The major client for the gas was the Republic of South Africa (SA), over a thousand miles away. Since its independence in 1992, Namibia depended on South Africa to supply its energy. The Namibian government had a strong interest in developing this field for energy self-sufficiency.

There were also significant business issues; royalties and taxes, the political situation in SA and market issues (SA was traditionally dependent on coal). All impacted the viability of this field's development.

Our Response

We decided to explore all of the issues, both technical and commercial, in a systemic way during the three-week window. All stakeholders were either in the room or available

for interview locally or by phone. During the three weeks we interviewed all of the technical experts, who explained the unique challenges presented by the depth of the offshore reserve and the distance of the field from the shore and from South Africa. We talked with experts familiar with both Namibia's and South Africa's energy needs. We also interviewed representatives from the Namibian government, oil and gas rig experts, and numerous others to understand all of the technical and financial aspects of the situation.

Each step of the way we built a causal map showing the whole system, adding each stakeholder's ideas to create a coherent whole. We shared each piece of the systems map, then the whole map to confirm the evolving picture. The map helped align all stakeholders with the broader reality, plus the requirements for successful development from each stakeholder.

Results

- The two-year analysis cycle was successfully reduced to three weeks.
- The oil company drilled five additional exploration wells and successfully proved up the reserves to validate value of long term contracts.
- The Namibian government made significant concessions on royalties and taxes to make the field economically viable.
- A multi-sectoral consortium (Namibian Government, Namibian Oil company, South African Energy company) has been formed to purchase the field and its reserves.
- Namibia is on its way to energy independence.