



Play Fairway Analysis Program

In September 2008, the Nova Scotia Department of Energy invested \$15 million in OERA to initiate a Play Fairway Analysis (PFA) of offshore Nova Scotia to undertake research with the goal of stimulating renewed offshore petroleum exploration activity. In the spring of 2009, OERA initiated an industry standard petroleum PFA and Geoscience Data Package program that was completed in July 2011.

OERA's Play Fairway Analysis is a proven process model. Beginning as early as 2006, OERA brought together researchers, industry, government representatives and academia through various forums, committees, and workshops to develop the research gaps and priorities for Nova Scotia's offshore energy. These venues for discussions and collaboration were essential in the creation of the initial competitive Request for Proposals process for the PFA, to the delivery of industry reviewed research. OERA has provided research that positions Nova Scotia's offshore resources as an attractive area for development by industry by presenting critical information about prospectively and resource potential for Nova Scotia's offshore.

A Play Fairway is the present day area of a potential reservoir unit, with the possibility of having a complete working petroleum system (seal, charge and trap). A Play Fairway Analysis examines relative risks and total volume potential and the four play components (reservoir, seal, charge, trap). It also provides prospect ranking across basins, identifies work program and data acquisition issues and helps in assignment of exploration budgets.

OERAs approach to research is collaborative, bringing together partners from over 25 companies worldwide, and over 100 researchers from Canadian and international research labs, universities, industry as well as federal and provincial research facilities. OERA's approach is also innovative as it combines world-class research geoscientists with proven industry experts that have experience in front line exploration decision-making. OERA's PFA method employs the use of various individual projects. Each undertaken by different researchers, the projects contracted by OERA were designed to incorporate leading academic research being undertaken in Halifax and have been combined into the final PFA.

How the final data is presented is a key component to OERA's PFA approach. The final results are available in a digital atlas that presents the results of the individual projects, as well as a sample data package so that interested companies can view the integrated outcomes to aid in their evaluation of prospects. The PFA's final results have shown that Nova Scotia's offshore has potential reserves of up to 121 trillion cubic feet of natural gas and 8.15 billion barrels of oil. These reserves are triple the original estimates of the basin's potential. The PFA has provided industry with dramatically more accurate mapping of the complex geology of the Scotian Shelf, and answered some key questions that have deterred past exploration efforts.

As a result of these findings, Shell has announced that it will be investing \$1.002 Billion into deepwater exploration in Nova Scotia. Shell intends to explore eight deepwater areas about 200 km from Nova Scotia's southwest coast. BP has announced that it will be investing \$1.050 Billion into four deepwater exploration areas in Nova Scotia. That is a total of \$2.052 Billion in investments for offshore Nova Scotia resulting from the PFA Programme.