

ABSTRAK

Energi merupakan unsur yang diperoleh dari sumber alam yang berfungsi untuk memenuhi kebutuhan manusia. Ketergantungan Indonesia dengan energi fosil masih tinggi. Kebutuhannya meningkat rata-rata 3,9% per tahun. Pada tahun 2020 pemanfaatan EBT hanya 16% dari total penggunaan energi. Di sisi lain ketersediaan energi fosil di proyeksikan terus menurun termasuk natural gas. PT KDL sebagai perusahaan energi di KIK mempunyai pembangkit PLTU dan PLTGU dengan bahan bakar natural gas. Perusahaan dituntut memenuhi *demand* yang terus meningkat di kawasan dan memenuhi regulasi, dimana Indonesia telah menandatangani ratifikasi sejalan dengan Perjanjian Paris dengan mengeluarkan kebijakan energi nasional yang teruang dalam Perpres No 22 tahun 2017 dalam Rencana Umum Energi Nasional (RUEN). PT KDL mempunyai potensi EBT seperti PLTS dan PLTB. Berdasarkan hal tersebut, mendorong perusahaan untuk melakukan diversifikasi dengan masuk bisnis EBT.

Tujuan utama dilakukan penelitian ini adalah untuk melakukan uji diversifikasi melalui *Create Economic Value* dengan *Porter Three Essential Test* meliputi *industry attractiveness test*, *cost of entry test*, *better off test* dan menganalisis keputusan beberapa skenario implementasi yang dipilih antara *make or buy or alliances*. Data yang digunakan terdiri dari data primer yang bersumber dari wawancara dengan manajemen PT KDL dan sekunder yang berasal dari studi kelayakan, RJPP, *annual report* dan data eksternal. Dari data tersebut dianalisis keatraktifan industri dengan *Five Forces Porter*, menghitung *cost of entry* paling murah, *better off test* melalui analisis *economies of scale* dan *economies of scope* serta opsi implementasi menggunakan metode *Multi Criteria Decision Analysis* (MCDA).

Dari uji keatraktifan diperoleh bahwa industri EBT menarik dimasukin karena persaingan sesama industri, ancaman pendatang baru, kekuatan tawar pembeli dan kekuatan tawar tinggi. Pada *cost of entry* biaya masuk paling rendah adalah *buy* dari IPP dan pengembangan internal dengan *loan*. Dari hasil uji *better off test* disimpulkan bahwa *economies of scale* menurunkan biaya produksi, sementara *economies of scope* menghasilkan peluang *joint procurement*, *marketing sales*, *operation*, *distribution*, *service*. *Strategic fit* juga di dapatkan pada aktivitas *Research and Development*, *human resources*. Dalam analisis pengambilan keputusan dengan metode MCDA didapatkan skenario pengembangan internal dengan *loan* menjadi rekomendasi dengan nilai hasil pembobotan sebesar 0,73.

Kata Kunci : diversifikasi, EBT, *attractive test*, *cost of entry test*, *better off test*, MCDA

ABSTRACT

Energy is an element obtained from natural sources serving to meet the human needs. Indonesia's dependence on fossil energy is still high. Demand continues to increase by an average of 3.9% per year. In 2020, the utilization of Renewable Energy (RE) is still low at 16%. Meanwhile, the availability of fossil energy is projected to continue to decline, including natural gas. PT KDL as an energy company has Steam Power Plants and Combined Cycle Power Plants with natural gas. Companies are required to meet the ever-increasing demand in the region and comply with regulations, where Indonesia has signed ratification that is in line with the Paris Agreement by issuing a national energy policy as stated in Presidential Regulation No. 22 of 2017 in the National General Energy Plan (RUEN). Currently, KIK has RE some potential such as Solar Power Plants and Wind Power Plants. Based on the explanation above, PT KDL is encouraged to do the diversification by entering the RE business.

The main goal of this research is to conduct a diversification test through Create Economic Value with Porter Three Essential Test including industry attractiveness test, cost of entry test, better off test and analyze the decisions of several scenarios chosen whether to make or buy or alliances. The data used consisted of primary data sourced from interviews with the management of PT KDL. Then, the secondary data is taken from feasibility studies, RJPP, annual reports and external data. From this data, the attractiveness of the industry is analyzed using Porter's Five Forces, calculating the cheapest cost of entry, better off test through an analysis of economies of scale and economies of scope as well as implementation options using this Multi Criteria Decision Analysis method (MCDA).

The attractiveness test revealed that the RE industry is attractive to enter because of industry rivalry, the threat of new entrants, the bargaining power of buyers and high bargaining power. Meanwhile, the lowest cost on the cost of entry is buying from IPP and internal development with a loan. Then, the results of the better off test showed that the economies of scale reduce the production costs, while economies of scope create opportunities for joint procurement, marketing sales, operation, distribution, service. The strategic fit is also obtained in R and D and human resources activities. In the analysis of decision making using the MCDA method, the internal development scenario with a loan is recommended with a weighted value of 0.73

Key Word : diversification, NRE, *attractive test*, *cost of entry test*, *better off test*, MCDA