

Pertamina's "Desa Energi Berdikari" Initiatives Towards Energy Transition in Subholding Upstream: Study Cases in West Madura Offshore, Subang Field, PT Pertamina Hulu Rokan, PT Pertamina Hulu Mahakam

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Abstract

Energy is defined as the capacity to perform work, which can take the form of heat, light, mechanics, chemistry, or electromagnetics, according to the first paragraph of Article 1 of the New & Renewable Energy (NRE) Act mentioned that all forms of energy that are obtained from or created by new technologies of processing non-renewable sources of energy and renewable energy sources are collectively referred to as "new energy." Examples of new energy sources include nuclear, hydrogen, methane gas, coal, molten coal, and carbonated coal. Power that comes from renewable sources is referred to as renewable power. The concept of "new technology" is ingrained within the meaning of "new energy." To put it another way, new energy is a form of energy that has never been utilised before, and it is an energy that is generated by technological means. Renewable energy sources are sources of energy that are produced from sustainable energy resources if they are correctly managed. Examples of renewable energy sources include earth heat, wind, bioenergy, sunshine, flow, and watershed, in addition to the movement and temperature differential of the sea layer. (Law). A source of energy known as renewable new energy (NRE) or renewable energy is one that derives its power from natural resources and is able to generate more energy than is used up in the process of extraction. This mature age, the growth of technology, and the change in the way that humans make use of energy has resulted in a more wide range of possibilities. This is because people have become more aware of the negative effects on the environment that are caused by the usage of non-renewable energy sources like fossil fuels. PT First Hulu Energy has and is in the process of conducting community development programs with the goal of increasing the use of these new renewable energies in the area in which they work. Currently participating in one of these schemes called WASTECO, which stands for Waste to Energy for Community through a complex network of obstructions. After that, the community uses this methane gas as an alternative to LPG gas for cooking, and UMKM uses it as a source of energy for their production business. Additionally, the gas is used by the community as a replacement for liquified petroleum gas. One of the economic indicators that was impacted as a result of the execution of the WASTECO program was a reduction of Rupiahs 272.6 million per year in home cooking costs.

NRE Program that is being implemented by PT Pertamina is not just restricted to the utilisation of methane gas, but it also encompasses the utilisation of other forms of renewable energy, such as solar energy (PLTS), biogas, biodiesel, and wind power (PLTB). The Self-Powered Energy Villages plan makes it possible to gain access to various renewable energy sources at prices that are more reasonable and on a communal level. Self-powered energy villages is a programme that adjusts to each community empowering location in such a way that allows

for different types of renewable energy to be used in each place, but it still refers to the five new energy sources of solar, wind, biogas, biodiesel, and methane gas.

Keywords:

Desa Berdikari Energi Program, NRE, Energy Efficiency.

Biographies

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Ulika Putrawardana is an Community Involvement Development pratician, Employee in Pertamina EP Cepu Region 4 Zona 11, He earned Bachelor of Law in Department of Law from Jember University, He has experienced more than 20 years in oil & gas industry majoring in community development, external relation , human capital development, general affair and organization development. As a contributor in journal and conference papers. And published "Batik Tanjunglebumi the art of Madura Batik" book that explains about the history of Maduranees legend Batik. Ulika has completed many community empowerment project at Gresik, Madura and East Java. Member of Oil & Gas Kompartemen East Java Chambers of Trade and Industry (KADIN).