

Abstract

The depletion of fossil-based energy in domestic and the world causes the world price of fossil fuel is mounting. To reduce the dependence on fossil energy sources, it is need to look for other sources. In Indonesia sources of nonfossil energy such as wind, water, waves, sunlight and so forth are available. The sources have a great potential for substituting the fossil-based energy. In addition, agricultural and forest materials or biomass can be an alternative to reduce energy dependence on fossil resources. In 2007, Indonesia's industrial sector has been using diesel oil as much as 1.75 million kL. With Indonesia's agricultural production capability available today, it can be estimated that agricultural production will be able to meet the needs of diesel oil in the industrial sector. Using current technology the biomass feedstock could beconverted into biodiesel or bioetanol. In this study, estimates based on the amount of corn produced in a year. As a conclusion, the agriculture products could provide bioenergy for the need of industies. However, the problem that may need to be studied further is that agricultural products or forest products became seizure between people who need food and energy. Therefore, we need the role of government intervention to regulate the proportion between food and energy needs. Keywords: fossil based energy, diesel oil