In thinking about the economics of off-shore oil, the main benefit is increased energy security. According to an $\frac{\text{RFF study}}{\text{RFF study}}$,

Netted out, the Brown and Huntington estimates suggest that the effect of increased U.S. oil production is about \$1 per barrel (or 2.4 cents per gallon of gasoline); for each barrel of increased U.S. oil production, the risk to the U.S. economy of supply disruptions is reduced by an expected value of about \$1.

What is being "netted out"? The direct effect of offshore oil is to decrease imports, a gain for energy security. But the indirect effect is to lower world oil prices a tad, thereby increasing U.S. demand (and hence imports).

The effect of offshore drilling on climate is negative — the price decrease results in more world consumption, hence more greenhouse gases. Each increased barrel consumed amounts to .4 tons of CO2 (this is an <u>EPA figure</u> that took some digging to find.) OMB's (low-ball) estimate for the social cost of carbon is <u>\$22/ton of CO2</u>, so that's \$8 barrel. So the energy security benefits are clearly outweighed by climate costs if each barrel of offshore oil results in an increase of .15 barrels in total world production, displacing .85 barrels of production elsewhere. In the short run, this is unlikely because the oil demand is quite inelastic, but long-run elasticity may be greater as people wait longer to invest in fuel efficient cars or make less use of public transportation. If I'm right that OMB's number for carbon is too low, then an even small effect on net oil production would be enough to outweigh the energy security benefits. (Of course, the estimated energy security benefit might also be too low, an offsetting adjustment).

There are also the local environmental impacts to consider, such as the current BP oil spill (but also less dramatic effects from wetland damage due to pipelines, routine leakage, etc.) In addition, there's the argument that it's better to delay drilling to take advantage of <u>option</u> <u>values</u> — essentially, the opportunity to learn more about future energy needs and impacts.

Overall, just in economic terms, the case for offshore oil doesn't look very compelling, but it would obviously take a lot more work to try to pin down these figures, and the range of uncertainty would probably still be substantial.