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Life cycle assessment of biomethane use in Argentina

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Abstract

Renewable substitutes for natural gas, such as biogas, require adequate treatment to remove impurities. This paper presents the life cycle and environmental impact of upgrading biogas using absorption-desorption process with three different solvents: water, diglycolamine and polyethylene glycol dimethyl ether. The results showed that water produces a minor impact in most of the considered categories, and an economic analysis showed that water is the most feasible solvent for obtaining the lowest payback period. This analysis includes three different sources for biogas production and two end

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