

# Obtainment of Briquettes Made of Coffee Husk as an Alternative of Heat Energy to the Use of Coal

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Coal is a fuel widely used in cauldrons, which are fundamental for production of food and textile in the industries located in the Aburrá Valley (Medellín, Colombia). This fuel impacts environmental phenomena due to the harmful gases it emits, such as carbon monoxide, sulfur oxides and carbon dioxide. Faced with this situation, the project aims to obtain briquettes (high-density solid blocks, generally used as biofuel) from coffee husk (cisco), agglomerated with potato or cassava starch (These three are highly produced in Colombia). Aiming to offer a more ecological alternative, the proportions of cisco - starch in the briquettes have been varied, to compare which ones give better results in different physicochemical tests. It is shown how the obtaining of briquettes was carried out and the findings when doing this. In this project, the starch extraction method and test measurement are presented as moisture percentage. Also, with the progress made, it has been partially concluded that briquettes are profitable and have minimal characteristics that make them a potential alternative to the use of coal.