

## عنوان مقاله:

Techno-economic Assessment of Biomass Energy Conversion Park in order to Achieve a Sustainable Energy Supply Point

## محل انتشار:

چهارمین کنفرانس بین المللی برنامه ریزی و مدیریت محیط زیست (سال: 1396)

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## نویسندگان:

kianoosh Choubineh - Sharif University of Technology

arash erfani - Sharif University of Technology

## خلاصه مقاله:

In rural areas with vast arable land, due to geographical conditions and environmental challenges, using renewable energy sources is becoming more essential. Constructing biomass energy Conversion Park based on various energy conversion technologies in this area, is one of the methods for using agricultural residues and woody waste. This paper presents a case study on energy and heating demand is conducted in some villages of Africa and India. to analyze the efficiency of constructing an energy conversion park in three base scenarios, tax on network's energy carriers and subsidies on the cost of renewable energy a survey on the competition between network's energy carriers and park's renewable energy sources have been conducted. Main objective is to supply family's electricity and heating demand , and the objective function is to minimize the investment cost which has been carried out by means of ESM software . Considering the efficiency and cost of various units and by modeling the network, minimal amount of subsidies needed on the cost of investment in renewable energy in order to justify the network's modeling objective function has been calculated. Also in relation to tax scenario by raising the cost of main network carrier as tax on the carriers, the minimum tax rate on energy carriers required for effective energy conversion park construction .has been determined

## کلمات کلیدی:

energy conversion park, biomass, energy supply system modeling

## لینک ثابت مقاله در پایگاه سیویلیکا:

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