

اولین همایش ملی مدیریت انرژی ها و نو و پاک

۱۳ شهریور ۱۳۹۳

همدان دانشکده شهید مفتح



Top down strategy for renewable energy investment: sizing methodologies and Integrated Renewable Energy System models

Emad Rabiei^{1*}, Peyman Ahmadian², Afshin Jalilzade³

(1) B.Sc., Industrial Engineering, Faculty of Engineering, Islamic Azad University, Karaj Branch, Iran
e.rabiei92@gmail.com mobile: +989194376369

(2) B.Sc., Industrial Engineering, Faculty of Engineering, Islamic Azad University, Karaj Branch, Iran
peyman70106@yahoo.com mobile: +989387731960

(3) B.Sc., Industrial Engineering, Faculty of Engineering, Islamic Azad University, Karaj Branch, Iran
afshin71_ja@hotmail.com mobile: +989128384361

ABSTRACT: In this paper, we present a top down strategy for renewable energy investment. The proposed approach is a three-step framework. By applying the approach, renewable energy global market leaders and trends will be identified and analyzed that included: (1) economics and renewable energy policy, (2) specific renewable energy sectors that presents the most attractive investment opportunity, (3) and finally the most promising renewable energy investment vehicles for investors. Other stakeholders can also use the developed framework, such as consumers and policymakers, to make socio-economic decisions and assess renewable energy investments. This paper presents an extensive review on various issues related to Integrated Renewable Energy System (IRES) based power generation. Issues related to integration configurations, storage options, sizing methodologies and system control for energy flow management are discussed in detail.

Key words: Renewable energy, Renewable energy policy, Renewable energy investment, integrated systems, Renewable energy resources, Renewable energy policies