

ABSTRACT

Name : Prasandi Bagus Santoso

NIM : 2014101006

Prodi : Arsitektur

Topic : Pencahayaan Buatan Berkelanjutan pada Stadion Utama Gelora Bung Karno Berdasarkan Standar GBCI

Case Study: Stadion Utama Gelora Bung Karno

Gelora Bung Karno Main Stadium is used as a venue for international and local events in sports. In welcoming the 18th Asian Games, August 2016 a total revitalization of Gelora Bung Karno Stadium in terms of capacity, facilities, sound system and especially in terms of lighting system. At recent days, many building designs are trying to become sustainable buildings. Energy expenditure especially using artificial lighting is particular concern in the revitalization of Gelora Bung Karno Stadium. But, the need for artificial lighting in large quantities at Gelora Bung Karno Stadium would require enormous electrical energy. Each area of Gelora Bung Karno Stadium has a number of lights, lighting techniques and different control systems. This research was conducted to understand about the use of artificial lighting and how much energy released at Gelora Bung Karno Stadium. Based on this understanding, this research also sees the sustainable side base on Green Building Council Indonesia (GBCI) standard in every area. Based on the calculation of each area will be seen whether the use of energy in Gelora Bung Karno Stadium has met the GBCI Standard and can save energy, especially artificial lighting.

Keyword: Stadium, Artificial Lighting, Sustainable, Energy.