

Energy Management Systems according to the ISO 50001 Standard – Challenges and Benefits

Thorsten Fiedler¹, Paul-Mihai Mircea²

¹ OHP Automation Systems GmbH, Rodgau/Germany, fiedler@ohp.de

² University of Craiova, Craiova/Romania, mmircea@elth.ucv.ro

Abstract— The transition to renewable energy sources and energy efficiency have become a central topic, also for the producing industry in Romania and all over Europe. Saving energy is on the agenda for companies as well as facilities and public institutions. Energy efficiency in companies can be controlled and systematized in an energy management system. The ISO standard 50001:2011 enables companies and other institutions to achieve a sustainable energy reduction by systematic energy controlling, documentation and raising the awareness of all personnel involved. This paper presents the challenges and benefits of an ISO 50001 implementation in an industrial environment as well as the methodology and systematic approach, but also tools such as energy controlling systems and measurement equipment which are helpful to achieve energetic transparency.