Abstract

Title: AGH Solar Boat as sustainable solution to combat climate change

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I. Abstract

Nowadays we are challenged by many issues regarding pollution in natural environment. Peoples' actions have a big impact on many environmental aspects including water which makes up to 71% of Earth's surface. There are various types of pollution sources. The biggest problem are marine transportation ships, nonetheless we have to point out the way people use inland waters. Rivers and lakes are used for recreational, cargo and communication purposes. Currently vast majority of boats is powered by conventional sources of energy. It has a negative impact on water quality as well as on people's life. For example recreational motor boats powered by combustion engine generate noise level within 70-110 dB. The noise may disturb the peace of people in the waterfront and more than 85 dB could affect human health.

One means of combating the issue is to replace boats that are powered by conventional energy sources with boats that are powered by solar energy. This paper considers to apply that solution by the example of solar boat built by students from AGH University of Science and Technology in Cracow, Poland. The paper compares solar boat and regular boat powered by non-renewable energy sources. It considers how it affects the environment and natural ecosystems. Furthermore, it shows the possibility to use solar boat in different areas of human life. Studies were performed based on a boat built by AGH Solar Boat Team.

II. Image:



Figure 1: Solar boat built by AGH Solar Boat Team

III. Reference:

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IV. Biography:

Aleksandra Skolarz is Electrical Engineering student from AGH University of Science and Technology in Krakow, Poland. She is a member of AGH Solar Boat Team for two years and this year the team won third place in Monaco Solar & Energy Boat Challenge. Member of Ministerial scholarship “Best of the best”.
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